

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION
COMMISSION

In the Matter of the)
) DOCKET NO. UT-003013
))
Continued Costing and Pricing of) THIRTEENTH SUPPLEMENTAL
Unbundled Network Elements, Transport,) ORDER; PART A ORDER
and Termination) DETERMINING PRICES FOR LINE
) SHARING, OPERATIONS SUPPORT
) SYSTEMS, AND COLLOCATION
.....)

I. SYNOPSIS

In this Order, the Commission resolves issues relating to costing and pricing for three aspects of the way competitive telecommunications companies interconnect with incumbent telecommunications companies: the high frequency portion of the local loop as a new unbundled network element (line sharing); unbundled access to incumbent local exchange carriers' operations support systems; and collocation of competitors' facilities in or near incumbents' facilities.

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II. PROCEDURAL SUMMARY

- 1 This proceeding was opened on February 17, 2000, to address issues arising out of Docket Nos. UT-960369, 960370, and 960371 (also referred to as the "Generic Costing and Pricing Proceeding").¹ On March 16, 2000, the Commission established a two-part schedule, and Part A issues were identified as line sharing, operations support systems ("OSS"), collocation, and nonrecurring charges.²
- 2 Part A evidentiary hearings began on August 21, 2000, and concluded on August 31, 2000. Parties filed opening and reply briefs on October 9 and 23, 2000, respectively. Part B hearings are scheduled to begin March 26, 2001.
- 3 **Parties:** The following participated in the Part A hearings: Qwest Corporation (formerly U S WEST Communications, Inc.) ("Qwest"), by Lisa A. Anderl, attorney, Seattle; Verizon Northwest Inc.(formerly GTE Northwest Incorporated) ("Verizon"), by Jennifer McClellan, W. Jeffrey Edwards, and Gregory Romano, attorneys, Richmond, Virginia; Covad Communications Company ("Covad") by Clay Deanhardt and Sarah Bradley, attorneys, Santa Clara, California; Telecommunications Ratepayers for Cost-based and Equitable Rates ("TRACER"), Rhythms Links, Inc. ("Rhythms"), Teligent Services, Inc. ("Teligent"), and Broadband Office Communications, Inc., by Arthur A. Butler, attorney, Seattle; Nextlink Washington, Inc., Electric Lightwave, Inc., Advanced Telecom Group, Inc., McLeod USA Telecommunications Services, Inc., AT&T Communications of the Pacific Northwest, Inc., New Edge Networks, Inc., NorthPoint Communications, and TCG Seattle (collectively, "Joint CLECs"), by Gregory J. Kopta, attorney, Seattle; WorldCom, Inc. ("WorldCom"), by Ann E. Hopfenbeck, attorney, Denver, Colorado; Public Counsel, by Simon J. ffitich, Assistant Attorney General, Seattle; and Commission Staff, by Shannon Smith, Assistant Attorney General, Olympia.

III. MEMORANDUM

¹ See *In the Matter of the Pricing Proceeding For Interconnection, Unbundled Elements, Transport and Termination, and Resale*, Docket Nos. UT-960369 (general), UT-960370 (U S WEST), and UT-960371(GTE), Order Instituting Investigations (November 20, 1996) ("UT-960369").

² Issues regarding nonrecurring charges were later moved to Part B of this proceeding.

A. Procedural Background

4 In November 1996, the Commission issued an Order Instituting Investigation and Consolidation in Docket Nos. UT-960369, 960370, and 960371, also referred to as the Generic Costing and Pricing Proceeding.³ The Commission initiated that proceeding to consider cost and pricing issues that arose during the arbitration process and out of the Commission's obligations under the Telecommunications Act of 1996 ("Act") to establish rates for UNEs, interconnection, transport and termination, and wholesale services.⁴

5 These cost and pricing issues also arise from the Commission's obligations in Title 80 RCW to regulate telecommunications companies in the public interest, and to establish rates and charges for telecommunications services. This case is a necessary and anticipated continuation of the Generic Costing and Pricing Proceeding. The prices established in the Generic Costing and Pricing Proceeding and this case are intended for use in pending and future arbitrations, and in tariffs required pursuant to Commission orders in the consolidated interconnection and Qwest rate case proceedings.⁵

6 Docket No. UT-960369 involved three phases. In Phase I of that proceeding, the Commission established a cost methodology and determined the direct cost of many unbundled network elements, as well as the wholesale discount for the resale of retail services for providing certain telecommunications services.⁶

7 In Phase II, the Commission determined the mark-up that should be applied to the

³ See *In the Matter of the Pricing Proceeding For Interconnection, Unbundled Elements, Transport and Termination, and Resale*, Docket Nos. UT-960369 (general), UT-960370 (U S WEST), and UT-960371(GTE), Order Instituting Investigations (November 20, 1996) ("UT-960369").

⁴ Pub. L. No. 104-104, 110 Stat. 56 (1996), codified at 47 U.S.C. §§ 151 *et seq.* (1996), 47 U.S.C. § 252(d).

⁵ Order Instituting Investigations; Order of Consolidation; and Notice of Prehearing Conference, Docket Nos. UT-960369, et al. (November 21, 1996) at 3.

⁶ Eighth Supplemental Order Interim Order Establishing Costs for Determining Prices in Phase II; and Notice of Prehearing Conference, Docket Nos. UT-960369, et al. (April 16, 1998).

direct cost of unbundled network elements.⁷ The mark-up was added to the direct cost in order to include a contribution to the common costs incurred by incumbent local exchange carriers in the price of unbundled network elements. In addition, the Phase II proceeding addressed the recovery of operations support system ("OSS") transition costs, nonrecurring charges, collocation, and various other matters related to the costing and pricing of interconnection and unbundled network elements. In Phase III, the Commission's addressed the deaveraging of unbundled loop prices.

B. Telecommunications Act of 1996

8 The purpose of the Act is to "provide for a pro-competitive, de-regulatory national policy framework designed to accelerate rapidly private sector deployment of advanced telecommunications and information technologies and services to all Americans by opening all telecommunications markets to competition" *H.R. Conf. Rep. No. 104-458, 104th Cong., 2d Sess. 13 (1996)*. Congress envisioned that the Act's pro-competitive policies would be accomplished, in large part, by requiring incumbent local exchange companies ("ILECs"), such as Qwest and Verizon, to open their networks to competitive local exchange companies ("CLECs").⁸ Several sections of the Act are especially relevant to Part A issues.

1. Interconnection, Unbundled Access, and Collocation Obligations

9 Section 251(c) of the Act obligates an ILEC to provide to any requesting carrier (1) interconnection of facilities and equipment with its network, (2) unbundled access to network elements, and (3) physical collocation of equipment necessary for interconnection or access to UNEs at its premises, on rates, terms, and conditions that are just, reasonable, and nondiscriminatory.⁹

2. Pricing Standards

⁷ Seventeenth Supplemental Order, Interim Order Determining Prices; Notice of Prehearing Conference, Docket Nos. UT-960369, et al. (August 30, 1999).

⁸ In this Order, reference to competitive local exchange carriers includes competitive carriers that exclusively provide advanced telecommunications services, which also are separately referred to as data local exchange carriers or "DLECs."

⁹ See 47 U.S.C. § 251(c)(2), (3), & (6).

10 Section 252(d)(1) of the Act requires that state commission determinations of the just and reasonable rate for interconnection and access to UNEs must be based on the cost of provisioning (determined without reference to a rate-of-return or other rate-based proceeding), must be nondiscriminatory, and may include a reasonable profit.

3. Subsidy of Competitive Services Prohibited

11 Section 254 of the Act addresses universal service issues. Subsection 254(k) states that a telecommunications carrier may not use services that are not competitive to subsidize services that are subject to competition. State commissions, with regard to intrastate services, must ensure that services which are included in the definition of universal service bear no more than a reasonable share of the joint and common costs of facilities used to provide those services.

4. Advanced Telecommunications Services

12 Section 706 of the Act requires each state commission to "encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans . . . by utilizing, in a manner consistent with the public interest, convenience, and necessity, price cap regulation, regulatory forbearance, measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment."

C. FCC Rules and Federal Court Review of Those Rules

13 Congress delegated to the Federal Communication Commission (FCC) the task of enacting rules to implement the local competition provisions of the Act, with the caveat that the FCC cannot preclude "the enforcement of any regulation, order, or policy of a State commission" that establishes access and interconnection obligations of local exchange carriers and is not inconsistent with the Act. *47 U.S.C. § 251(d)*. In response to this mandate, the FCC's Local Competition Order promulgated rules that, among other requirements, specified which network elements ILECs must make

available to CLECs on an unbundled basis and established a cost methodology for state commissions to follow when setting prices under the Act.¹⁰

14 Many parties petitioned for judicial review of the FCC's Local Competition Order. The cases were consolidated in the Eighth Circuit Court of Appeals. The Eighth Circuit affirmed in part, and vacated in part, the FCC's rules.

1. UNE Access

15 One of the network elements the FCC required ILECs to unbundle is their operations support systems functions. 47 C.F.R. § 31.319(f). On its review of the Local Competition Order, the Eighth Circuit affirmed the specific unbundling requirements set forth in Rule 319, except to the extent that the rule "establishes a presumption that a network element must be unbundled if it is technically feasible to do so."¹¹ The Supreme Court, however, vacated Rule 319 in its entirety and remanded to the FCC for limitations on its definition of the words "necessary" and "impair" as they are used to establish the specific unbundling requirements of 47 U.S.C. § 251(d)(2).¹² On remand, the FCC reaffirmed its decision to require that ILECs provide CLECs with access to their OSS on an unbundled basis.¹³

2. UNE Pricing

16 In establishing the cost methodology state commissions must use to set prices for unbundled network elements, the FCC determined that a "forward-looking" cost methodology would comply with the pro-competitive purpose of the Act. For unbundled network elements, the FCC adopted a version of "total service long run

¹⁰ See *In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, 11 FCC Rcd 15499 (August 8, 1996) ("Local Competition Order"), *aff'd in part and vacated in part, Iowa Utils. Bd. v. FCC*, 120 F.3d 753 (8th Cir. 1997), *aff'd in part and rev'd in part and remanded sub nom. AT&T Corp. v. Iowa Utils. Bd.* 525 U.S. 366 (1999); see also 47 C.F.R. § 51.319.

¹¹ *Iowa Utils. Bd.*, 120 F.3d at 819 n.39.

¹² *AT&T Corp.*, 525 U.S. at 387-92.

¹³ *In the Matter of Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Third Report and Order and Fourth Further Notice of Proposed Rulemaking ("UNE Remand Order"), 15 FCC Rcd 3696, 3884 (Nov. 5, 1999) at para. 424.

incremental cost" that it called "total element long run incremental cost" or "TELRIC."¹⁴ The FCC also decided that the forward-looking pricing methodology should be "based on costs that assume that wire centers will be placed at the incumbent LEC's current wire center locations, but that the reconstructed local network will employ the most efficient technology for reasonably foreseeable capacity requirements."¹⁵

17 The Eighth Circuit vacated the FCC's pricing rules in the Local Competition Order because it found that the FCC did not have jurisdiction to set the pricing methodology that states must follow. The Supreme Court disagreed, holding that the Act authorized the FCC to enact the pricing rules.¹⁶ On remand, the Eighth Circuit affirmed in part, and vacated in part, the FCC's pricing rules.¹⁷ The Eighth Circuit affirmed the use of a forward-looking methodology; however, the court vacated the rule requiring that the cost be determined based on a "hypothetical," "most efficient" network configuration. The Eighth Circuit has stayed its vacatur of this rule and the Supreme Court has granted petitions for certiorari.

3. Collocation Requirements

18 The FCC has promulgated rules regarding an ILEC's obligation to permit the collocation of CLEC equipment on the incumbent's premises. 47 C.F.R. § 51.323. These rules were specifically affirmed by the Eighth Circuit on its review of the Local Competition Order.¹⁸ The FCC later refined some of its collocation requirements, including its definitions of "necessary," "physical collocation," and

¹⁴ See Local Competition Order, 11 FCC Rcd at 15844-46, 15850-51, 15857, para. 672-79, 690-93, 704; 47 C.F.R. §§ 51.501-15.

¹⁵ Local Competition Order, 11 FCC Rcd at 15848-49, para. 685; see also 47 C.F.R. § 51.505(b)(1).

¹⁶ *AT&T Corp.*, 525 U.S. at 377-85.

¹⁷ *Iowa Utils. Bd. v. FCC*, 219 F.3d 744 (8th Cir. 2000).

¹⁸ *Iowa Utils. Bd.*, 120 F.3d at 818.

"premises," and imposed a requirement that ILECs must permit cageless collocation in its Advanced Services Order.¹⁹

19 Many parties sought judicial review of the Advanced Services Order before the D.C. Circuit. That court expressly affirmed the FCC's requirement for cageless collocation and its decision permitting adjacent collocation.²⁰ However, the court invalidated the FCC's expanded definition of equipment "necessary" for collocation as equipment that is "used and useful." The court believed the definition was too broad and would permit the collocation of "any and all" CLEC equipment, which was not what Congress had intended. The court also vacated the requirement that CLECs may collocate their equipment in any unused space on the ILECs premises.²¹

4. Collocation Pricing

20 In the Local Competition Order, the FCC held that the standard for setting prices for collocation should be the same as the pricing standards for interconnection and unbundled network elements.²² The Act provides that prices for collocation be "just, reasonable, and nondiscriminatory," 47 U.S.C. § 251(c)(6), which is the same standard for setting the prices of interconnection and access to unbundled network elements. 47 U.S.C. § 252(d)(1).

21 In the Advanced Services Order the FCC concluded that ILECs must allocate space preparation, security measures, and other collocation charges on a pro-rated basis.²³ This approach will ensure that the first CLEC to collocate on an ILEC's premises does not bear the entire site preparation costs. The FCC authorized state commissions to determine the price methodology for allocating site preparation costs among CLECs.

¹⁹ *In the Matters of Deployment of Wireline Services Offering Advanced Telecommunications Capability*, 14 FCC Rcd 4761 (1997) ("Advanced Services Order").

²⁰ *GTE Service Corp. v. FCC*, 205 F.3d 416, 424-25 (D.C. Cir. 2000).

²¹ *Id.* at 423-26 (vacating requirement set forth in Advanced Services Order, para. 42).

²² Local Competition Order, 11 FCC Rcd at 15816 at para. 629.

²³ Advanced Services Order, 14 FCC Rcd at 4789 at para. 51.

5. Line Sharing Rules

22 The FCC has determined that the high-frequency spectrum of the loop is an unbundled network element to which ILECs must provide CLECs access.²⁴ In the Line Sharing Order, the FCC noted that there is no longer any dispute that two-carrier line sharing is technically feasible.

6. Line Sharing Pricing

23 The high-frequency spectrum of the loop is a UNE. Therefore the price must be based on cost, 47 U.S.C. § 252(d)(1), and comply with the FCC's TELRIC methodology. The FCC established guidelines for state commissions to follow when setting the price for line sharing.²⁵

D. Issues Before the Commission

1. High Frequency Spectrum Unbundled Network Element ("HUNE")

a. Background

24 Local exchange carriers ("LECs") have traditionally used only the low-frequency portion of a copper loop to provide analog voice telecommunications services. However, carriers recently have begun to exploit the unused high frequency portion of the loop to provide high-speed connections between subscribers and packet-switched networks, including access to the Internet, through Digital Subscriber Line service ("xDSL").²⁶ On December 9, 1999, the FCC issued an order and rule 47 C.F.R. § 51.319(h) establishing the high frequency portion of the local loop as a new unbundled network element.²⁷ The FCC defined the high frequency portion of the loop as "the frequency range above the voiceband on a copper loop facility that is

²⁴ *In the Matters of Deployment of Wireline Service Offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, 14 FCC Rcd 20912, 20926 (1999) ("Line Sharing Order") at para. 25.

²⁵ Line Sharing Order, 14 FCC Rcd at 20973-91, at para. 131-57.

²⁶ xDSL is used to refer generically to the various types of Digital Subscriber line services available.

²⁷ The FCC's Line Sharing Order.

being used to carry analog circuit-switched voiceband transmissions."²⁸

Consequently, a single copper loop is capable of simultaneously providing analog voice transmissions with other services that are characterized as advanced telecommunication services.

25 Access to the high frequency spectrum unbundled network element ("HUNE") enables competitive LECs ("CLECs") to compete with incumbent LECs ("ILECs") to provide to consumers xDSL-based services through telephone lines that the CLECs can share with ILECs. Line sharing generally describes the ability of the ILEC to provide voice services and the CLEC to provide data service over the same loop, with each provider employing different frequencies to transport voice or data over that line.²⁹

b. Positions of the Parties

26 The Commission must determine whether CLECs providing advanced telecommunications services using the high frequency portion of the loop via line sharing must make a contribution towards the recovery of the recurring cost of the loop, and if so, what contribution must be made. Parties in this docket present divergent positions on this pricing issue. Covad, TRACER, and Verizon contend that carriers requesting access to the HUNE should not be required to make any contribution to the recurring costs of the loop (\$0). In contrast, Qwest argues that "the Commission should establish a price that is 50% of the loop price (not to exceed \$10.00) for the high frequency portion of the loop (HUNE)."³⁰

27 Qwest views the loop as a shared cost between voice and advanced telecommunication services and concludes that it is appropriate for the users of advanced telecommunication services to make a contribution to the common and joint costs of the loop. However, Qwest also states that in the retail service environment for its own xDSL product (MegaBit service), it attributes the cost of the loop to basic service, and therefore it does not attribute any incremental cost of the loop to MegaBit since both voice and MegaBit services are provided over a single

²⁸ *Id.* at para. 26; 47 C.F.R. § 51.319(h)(1).

²⁹ *Id.* at para. 17.

³⁰ *Opening Brief of Qwest Corporation* at para. 35.

loop. See Exs. 34 and 35. Qwest witness Dr. Fitzsimmons testified that no direct cost for the loop can be identified when xDSL service is provided because there are no incremental costs associated with adding xDSL service to a loop that was already being used to provide voice services.

Q: Now, focusing again on what we have described as the loop, the piece of copper between the network interface device and the central office, isn't it correct that there are no additional costs to the loop itself when a CLEC provides DSL service using the HUNE?

A: That's correct. . . . [T]here are not any additional costs.³¹

28 Covad, Rhythms, and TRACER contend that requiring the CLECs to make a contribution to the loop for the HUNE would unfairly discriminate by imposing greater costs on CLECs, would constitute a price squeeze, and would impede the development of advanced telecommunication services in the state of Washington.

29 When ILECs initially introduced xDSL service, a question arose whether the service should be classified as an intrastate or an interstate product. The FCC asserted jurisdiction over the pricing of xDSL services because access to the Internet was deemed to be an interstate service.³² Accordingly, the FCC concluded that it was appropriate for it, rather than the states, to establish the price of xDSL services provided by ILECs.

In this Order, we conclude our investigation of a new access offering filed by GTE that GTE calls its DSL Solutions-ADSL Service ("ADSL service"). We find that this offering, which permits Internet Service Providers (ISPs) to provide their end user customers with high-speed access to the Internet, is an interstate service and is properly tariffed at the federal level. (Footnote omitted).³³

30 In that proceeding, CLECs raised concerns that the ILECs were going to have an

³¹ TR 181:3-11 (Fitzsimmons).

³² GTE Tel. Operating Cos. GTOC Transmittal No. 1148, CC Docket No. 98-79, FCC 98-292, *Memorandum Opinion and Order* (rel. Oct. 30, 1998) ("GTE-DSL Order") at para. 1.

³³ *Id.*

important competitive advantage over CLECs in providing advanced telecommunication services. In theory an ILEC, whose loop cost contributions were already covered by the revenues from voice services, could price advanced telecommunications services lower than their competitors because their competitors would incur the additional production cost of providing a loop. The FCC found that it is not unfair to say that there is no direct cost of the loop when providing xDSL service and concluded that this pricing methodology did not result in a price squeeze. The FCC said that there would be no price squeeze as long as the CLEC used the loop to provide both voice and data services.³⁴ Effectively, the FCC was encouraging the CLECs not only to enter the data markets, but also to enter the voice markets.

31 The FCC reconsidered the potential for such a price squeeze in its Line Sharing Order, and noted that the TELRIC methodology that it adopted in its Local Competition Order does not directly address the pricing of the HUNE because TELRIC was designed to price discrete network elements or facilities, rather than a facility shared by two service providers.

In the case of line sharing, however, the facility in question is, by definition, also used for two incumbent LEC services (local exchange service and interstate access service). We are thus presented with the question of how to establish the forward looking economic cost of unbundled bandwidth on a transmission facility when the full embedded cost of that facility is already being recovered through charges for jurisdictional services.³⁵

32 The impetus behind the Line Sharing Order is the goal to expedite the deployment of xDSL-based advanced services while simultaneously fostering meaningful competition in the provision of those services. The FCC stated:

Even if line sharing is made available to competitive LECs, however, it will not promote competition unless it is priced in a way that permits competitive LECs to enjoy the same economics of scale and scope as the incumbent LECs.³⁶

³⁴ GTE-DSL Order at para. 31.

³⁵ Line Sharing Order at para. 138.

³⁶ *Id.* at para. 133, also citing the Local Competition Order, 11 FCC Rcd at 15846 at para. 679.

33 Because line sharing was classified as an unbundled network element it was within the FCC's jurisdiction to provide pricing guidance, but the FCC did not tell state commissions directly how to price this unbundled network element. The FCC stated:

We conclude that, in arbitrations and in setting interim prices, states may require that incumbent LECs charge no more to competitive LECs for access to shared local loops than the amount of loop costs the incumbent LEC allocated to ADSL services when it established its interstate retail rates for those services.³⁷

34 The parties in this docket disagree on how to interpret that statement. On one hand, Qwest argues:

In its Line Sharing Order, the FCC stated that state commissions "may require that incumbent LECs charge no more to competitive LECs for access to shared loops than the amount of loop costs the incumbent LEC allocated to ADSL services when it established its interstate retail rates for those services." Line Sharing Order ¶ 139. This pricing "guidance" by the FCC suggests that state commissions could choose to price the high frequency loop based on the amount of loop cost the incumbent LEC "allocated," "attributed," or "imputed" in its interstate xDSL cost filing with the FCC.³⁸

35 On the other hand, Covad and Rhythms stress that this sentence instructs the commissions that the price *cannot* be higher than the charge to the ILECs' own retail

³⁷ Line Sharing Order at para. 139.

³⁸ *Opening Brief of Qwest Corporation* at para. 61.

operations. In their opening brief, Covad and Rhythms quote a later FCC Order regarding access reform issues in support of their argument that this pricing principle for the HUNE is mandatory, not suggestive:

The Line Sharing Order concluded that states should not permit incumbent LECs to charge more to competitive LECs for access to shared local loops than the amount of loop costs the incumbent LEC allocated to ADSL services when it established its interstate retail rates for those services.³⁹

36 In their opening brief, Covad and Rhythms restate their concern that any non-zero recurring price for the HUNE results in a price squeeze:

In addition, any price greater than \$0 would allow Qwest to put the CLECs in exactly the price squeeze that the FCC sought to avoid by ordering line sharing. A price squeeze could happen because Qwest could undercut CLEC prices by setting its retail prices for MegaBit below the sum of direct costs plus the HUNE charge it does not have to pay. (Footnote omitted).⁴⁰

37 Other parties to this proceeding made proposals that fall between the two views discussed above. Commission Staff recommends that if the Commission decides to set a positive price for the high-frequency spectrum of the loop, that price should not exceed \$0.96 per shared loop. Staff contends that because the cost of line sharing is zero and because the only applicable common cost is the common cost of the loop, Qwest should be entitled to recover no more than one-half the UNE loop common cost of \$1.91.⁴¹

38 Public Counsel recommends that the Commission allocate a reasonable portion of cost to line sharing and, as a result, adopt a positive or "non-zero" price for the HUNE. Public Counsel argues that adoption of a zero price would violate Section 254(k) of the Act, and would violate the principle that the loop is a shared cost and

³⁹ FCC 00-193, Sixth Report and Order in CC Docket Nos. 96-262 and 94-1, Report and Order in CC Docket No. 99-249, Eleventh Report and Order in CC Docket No. 96-45 (May 31, 2000) at para. 98.

⁴⁰ *Part A Post Hearing Brief of Covad and Rhythms* at para. 48.

⁴¹ *Opening Brief of Commission Staff* at para. 25-27.

should be properly supported by all services that require the loop for their provisioning.⁴² Public Counsel considers Commission Staff's proposal of \$0.96 as a minimum contribution and Qwest's proposal as a maximum contribution. Public Counsel also argues that the Commission should require ILECs to impute to themselves the recurring charge adopted in this proceeding.

39 The Commission's decision on HUNE pricing policy is guided by four major issues raised by the parties in this case:

- What pricing policy will emulate a competitive market?
- What pricing policy will promote competition and the development of advanced telecommunications services?
- What are the appropriate shared costs and how should they be recovered?
- What pricing policy prevents a price squeeze?

c. Policy Issues

i. What Pricing Policy Will Emulate a Competitive Market?

40 Qwest argues that one of the goals of this proceeding should be to establish a policy for line sharing that emulates a competitive market. According to Qwest, the CLECs acknowledge that the goal in this proceeding is to establish prices that would be set in a competitive environment.⁴³

41 Qwest argues that a non-zero price for the HUNE must be adopted in order to emulate the actions of a competitive market because other unregulated suppliers of advanced telecommunications services incur costs that are parallel in principle to a non-zero price for the HUNE. Qwest refers to the requirement that satellite providers are required to pay competitive prices for frequencies they acquire through public auctions and use to provide their services. Similarly, cable modem providers must

⁴² *Opening Brief of Public Counsel (Part A)* at page 1.

⁴³ *Opening Brief of Qwest Corporation* at para. 39. *See also* TR 1144 (Cabe).

make substantial investments in their network to be able to provide competitive, high speed data services.⁴⁴

42 Qwest also states that: "The norm in a competitive market is that a product in limited supply that has a positive demand also has a positive price."⁴⁵

43 The CLECs contend that establishing a non-zero price for the HUNE will not properly emulate the forces of a competitive market because it will allow Qwest to over recover costs and to impose costs upon their competitors. Covad and Rhythms argue that the Commission "must not allow pricing that will lead to supra-normal profits, and it must not give the incumbent the ability to unilaterally raise its competitors' costs."⁴⁶

ii. What Pricing Policy Will Promote Competition and the Development of Advanced Telecommunications Services?

44 Qwest states that both the 1996 Telecommunications Act and the FCC's pricing rules are designed to foster fair and equal competition among providers and to foster technological innovation through investment in telecommunications facilities.⁴⁷ Covad, Rhythms, and TRACER have noted that the FCC issued the Line Sharing Order with the intention to accelerate the development of competition in this market.

45 Furthermore, section 706 of the Act instructs commissions to "adopt policies that will promote the advancement of advanced telecommunications services." In this proceeding, the CLECs contend that if the Commission were to adopt a zero recurring price for the HUNE, the goal of Section 706 would be satisfied because such a policy would promote the deployment of xDSL services in the state of Washington.

46 Qwest argues that establishing a zero price for the high frequency loop would

⁴⁴ *Id.* at para. 53.

⁴⁵ *Id.* at para. 39. *See also* Exh. T-3 at 7.

⁴⁶ *Part A Post Hearing Brief of Covad and Rhythms* at para. 12. *See also* Exh. T-194 at 10.

⁴⁷ *Opening Brief of Qwest Corporation* at para. 46.

promote the deployment of advanced telecommunications services in Washington, but it would fail to do this on a competitively neutral basis. Setting a zero price for the HUNE gives DSL providers a competitive advantage over other types of high-speed Internet access providers, such as satellite and cable companies, who must pay for the facilities they use to provide high speed data services. Moreover, according to Qwest, a price of zero for the high frequency loop will give DSL providers the ability to engage in precisely the type of price squeezing against their competitors that the FCC feared the incumbent LECs could impose against the DSL providers.⁴⁸

47 Qwest also argues that alternative providers of high speed data services will have less incentive to invest if they are competing against DSL providers that do not pay for their essential facility. Further, the DSL providers themselves will have significantly reduced incentive to build their own facilities and to invest in alternative technologies if they do not have to pay for the high frequency loop.⁴⁹

iii. What Are the Appropriate Shared Costs and How Should They Be Recovered?

48 Public Counsel advocates a non-zero price for the HUNE for two reasons. First, Public Counsel notes that the Commission concluded in the 1995 U S WEST rate case that the loop is a shared cost that should not be assigned exclusively to exchange telecommunication services. There the Commission held:

The Commission finds, consistent with the presentations of Public Counsel/AARP and other parties, that the cost of the local loop is not appropriately included in the incremental cost of local exchange service. The local loop facilities are required for nearly every service provided by the Company to a customer. Neither local services nor in-state long distance service nor interstate long distance, nor vertical features can reach a customer without the local loop. Should USWC cease to provide any one of these services, its need for a local loop to provide the remaining services would remain. The cost of the local loop, therefore, is not incremental to any one service. It is a shared cost that should be recovered in the rates, but no one

⁴⁸ *Opening Brief of Qwest Corporation* at para. 53.

⁴⁹ *Id* at para. 54. *Also see* Exh. T-1 at 17-18.

service is responsible for that recovery.⁵⁰

49 Public Counsel's second basis for supporting a non-zero recurring charge for the HUNE is section 254(k) of the 1996 Telecommunications Act. Public Counsel contends that in enacting this provision, Congress sought to ensure that core telephone services (those included within the definition of universal service) would not be saddled with an undue and excessive burden of cost recovery for all services using the same network facilities.⁵¹ Section 254(k) states:

A telecommunications carrier may not use services that are not competitive to subsidize services that are subject to competition. The Commission, with respect to interstate services, and the States, with respect to intrastate services, shall establish any necessary cost allocation rules, accounting safeguards, and guidelines to ensure that services included in the definition of universal service bear no more than a reasonable share of the joint and common costs of facilities used to provide those services.

50 Public Counsel argues that Section 254(k) therefore requires that the Commission ensure that basic exchange service in Washington bear no more than a reasonable share of the cost of the loop, and that loop costs must be shared by services utilizing the loop.⁵²

iv. What Pricing Policy Prevents a Price Squeeze?

51 During the hearings it was pointed out that a price squeeze could easily happen under the pricing proposal offered by Qwest. In this proceeding, Qwest generally proposes that the Commission should establish a price of 50% of the loop price (not to exceed \$10.00) for the HUNE.⁵³

⁵⁰ *Washington Utilities and Transportation Commission v. U S West Communications Inc.*, UT-950200, Fifteenth Supplemental Order (April 11, 1996) at pp. 83-84. The Commission's decision was affirmed on appeal by the Washington Supreme Court and the loop cost portion of the decision was not challenged. *U S West Communications, Inc., v. Washington Utilities and Transportation Commission*, 134 Wn. 2d 74, 83, 99, 949 P. 2d 1337 (1997).

⁵¹ *Opening Brief of Public Counsel (Part A)* at p. 4.

⁵² *Id.* at p. 5.

⁵³ Exh. T-15 at 7. *See also Opening Brief of Qwest Corporation* at para. 35.

52 TRACER cites the testimony of Qwest's witness, Thompson, to illustrate this point. On cross examination, Thompson explained that Qwest's MegaBit product retails at \$29.95 and that the direct costs of providing MegaBit are \$17.32. That leaves Qwest with a margin of \$12.63 with which to cover common costs and earn a profit. Assuming that a competing CLEC prices its comparable DSL product at \$29.95, and further assuming that the CLEC incurs the same direct costs as Qwest, if that CLEC is required to pay an additional \$9.08 (50% of Qwest's non-deaveraged unbundled loop rate) for the HUNE, it will be left with \$3.55 to cover common costs before profit.⁵⁴

53 Mr. Thompson testified that if a CLEC has the same direct cost as Qwest and if all of Qwest's pricing proposals are accepted, there will be a price squeeze. That is, the combination of the HUNE contribution, OSS charges, and the direct costs incurred by the CLEC will result in a total cost that exceeds the current retail price for advanced telecommunication services.⁵⁵

54 Qwest and Public Counsel emphasize that the FCC only advised the state commissions that they *may* apply the same HUNE pricing standard for CLECs that is used by ILECs in the cost studies for retail services, but did not mandate that they do so. These parties further point out that the FCC requires that all unbundled network elements make a contribution to shared costs.

d. Discussion and Decision

i. HUNE Pricing

55 Consistent with the FCC's requirement that all UNEs make a contribution toward shared costs, we establish a non-zero HUNE price, with the aim of significantly reducing or eliminating the possibility that a price squeeze could occur.

56 We find that the loop is a shared cost used by voice and advanced telecommunication services. LECs provisioning advanced telecommunication services should provide a contribution to the cost of the loop in the same way in that LECs provisioning voice services make a contribution to this cost.

⁵⁴ *Opening Brief of TRACER* at para. 18. *See also* TR 417:21 - 419:14 (Thompson).

⁵⁵ The threat of a price squeeze would be even greater if the Commission were to approve Qwest's request for a recurring monthly charge of \$3.75 to recover line sharing specific OSS costs. *See* TR 511-512.

- 57 Because the loop is used to provide both basic exchange and advanced telecommunications service, recovering the entire cost of the loop from voice services would violate Section 254(k) of the Act. Because the cost of the loop is considered to be a shared cost for the provision of voice and advanced services, we conclude that a portion of the cost of the loop should be recovered from LECs providing advanced services and specifically digital subscriber line services. We base this conclusion on FCC pricing guidelines, our reading of the 1996 Telecommunications Act, the Commission's prior orders, and our rejection of arguments that there is a zero cost associated with providing the HUNE.
- 58 We disagree with the argument that there is a zero cost associated with providing advanced telecommunication services. In Docket No. UT-960369, et al., the Commission's Eighth Supplemental Order established that designing a network for advanced telecommunication services involved incremental costs relative to the cost of a network that is used to provide only voice services.⁵⁶ The Commission made an explicit adjustment to reflect the fact that when advanced telecommunication services are provided, load coils are not installed.
- 59 Load coils are used to amplify voice signals but they impede the passage of data signals. Both this Commission and the FCC have required developers of cost models to exclude the cost of load coils because they are inconsistent with the way networks are designed today for the provision of advanced telecommunications services. The exclusion of the cost of load coils from a model raises the cost of providing loops:

The loop design incorporated into a forward-looking economic cost study or model should not impede the provision of advanced services. For example,

⁵⁶ *In the Matter of the Pricing Proceeding For Interconnection, Unbundled Elements, Transport and Termination, and Resale*, Docket Nos. UT-960369 (general), UT-960370 (U S WEST), and UT-960371(GTE); Eighth Supplemental Order (April 16, 1998) (Generic Case). The Commission resolved most of the Generic Case cost issues in the 8th Supplemental Order. See paragraphs 137-145, 269, and 270.

loading coils should not be used because they impede the provision of advanced services. (Footnote omitted).⁵⁷

- 60 Networks are increasingly being designed at this time to provide advanced telecommunication services. Due to the more stringent technical requirements of providing advanced telecommunications services, the incremental cost of these products is not zero. Therefore, we believe it is appropriate to recover a portion of the cost of the loop from LECs providing advanced telecommunication services.
- 61 This Commission recognizes that Section 706 of the Act requires us to adopt policies that promote the deployment of advanced telecommunication services. However, we believe that the Section 706 requirement to encourage deployment of advanced services in a manner that removes barriers to infrastructure investment requires that a non-zero cost for the HUNE be established, so as to not to hinder the infrastructure investment desired by Congress when it passed the Act.
- 62 Furthermore, Section 254(k) of the Act states that "[a] telecommunications carrier may not use services that are not competitive to subsidize services that are subject to competition." This section of the Act, in conjunction with the Section 706 requirement that infrastructure development not be hindered, provides even greater support for establishing a non-zero price for the HUNE section of the loop.
- 63 We do not believe that requiring LECs provisioning advanced telecommunications services to make a contribution towards the cost of upgrading the network to provide these services constitutes an impediment to the deployment of such services. Instead, such a requirement leads to a rate reflecting that the cost-causer is increasingly the end-user of advanced telecommunication services. It is sensible to recover these costs from LECs provisioning advanced telecommunications services, rather than relying on all users of voice services to compensate the ILEC for costs incurred providing services that are used today by a small percentage of the population. The price of the HUNE should be set at a level where it will not inhibit facilities-based competition. Establishing a zero price HUNE would fail to fulfill this objective.

ii. Establishing the HUNE Rate

⁵⁷ In the Matter of the Federal-State Joint Board on Universal Service, CC Docket No. 96-45, *Report and Order* (May 8, 1997) at para. 250(1).

- 64 As stated above, Qwest proposes that the price of the HUNE be equal to 50% of the cost of the entire loop but not to exceed ten dollars. The dollar amount proposed by Qwest is inappropriate because it readily results in a price squeeze. Staff proposes that the contribution be set at ninety-six cents. This rate is equal to 50% of the joint and common cost contribution that is included in the price of the loop. This figure is also inappropriate because it does not take into account that (1) the loop is a shared cost and all services that use the loop should make a contribution towards this shared input, and (2) Section 254(k) of the Act requires that basic voice services pay no more than a fair portion of shared costs. The incremental cost of providing advanced telecommunications services, such as ADSL, is not zero. We choose to establish a flat-rate contribution of four dollars for the use of the high frequency portion of the loop.
- 65 We establish a flat-rate contribution, rather than one that is calculated as a percentage of the cost of the loop, in part because UNE rates in the state of Washington have been de-averaged. In some urban areas of Washington the unbundled loop rate is less than ten dollars. In these areas, for example, a 25% contribution would come to less than three dollars. On the other hand, by this same methodology, the contribution required of many rural customers would be quite high and would be a disincentive for providing advanced telecommunications services in rural areas. For example, the UNE loop rate is more than forty-nine dollars in some rural areas.⁵⁸ If the Commission established a requirement that 25% of loop costs be assigned to the cost of the HUNE, LECs providing advanced services in rural areas would be required to contribute more than twelve dollars toward the cost of the loop. Such a percentage-based contribution could result in a price squeeze that discourages LECs from offering advanced telecommunication services in rural areas.
- 66 One of the Commission's objectives is to encourage the deployment of advanced telecommunications services to all consumers in the state of Washington. We conclude that to establish the HUNE contribution as a percentage of the UNE price would be inconsistent with the policy objectives of Section 254 and Section 706 of the 1996 Telecommunications Act. A flat-rate contribution of four dollars for use of the high frequency portion of the loop does not result in a price squeeze and does not impede deployment of advanced services.

⁵⁸ See Docket No. UT-960369, et al., 24th Supplemental Order at para. 79.

67 Qwest argues that it can prevent a price squeeze by agreeing to price its MegaBit service higher than the sum of its direct costs plus an imputed amount for the HUNE.⁵⁹ In order to ensure that a price squeeze does not occur, we will require Qwest to submit evidence to this Commission showing that any proposed changes to the retail price of its advanced telecommunications services pass an imputation test.

iii. Parity Among LECs

68 While neither Qwest nor Verizon shows any loop costs, or HUNE costs, in their FCC filing in support of xDSL tariffs, Qwest requests that the Commission establish a non-zero price for line sharing. Verizon allocates zero cost to the loop for purposes of setting prices for line sharing (as defined by the FCC) in this proceeding. Thus, Verizon argues that this is not a disputed issue between itself and the CLECs, and that the issue need not be addressed with regards to Verizon's operating territories.⁶⁰

69 Unlike Qwest, Verizon provisions retail advanced telecommunications services in the state of Washington through a subsidiary not subject to rate regulation. However, we find it inappropriate to treat Verizon any differently from Qwest on this issue. All of the principles that lead the Commission to conclude that a non-zero HUNE contribution is appropriate also lead us to conclude that CLECs in Verizon's territory should be required to make the same contribution as CLECs operating in Qwest's territory.

70 Furthermore, Verizon's subsidiary provisioning advanced telecommunications services in the state of Washington must also pay the flat-rate contribution to Verizon's regulated operations for use of the high frequency portion of the loop in Verizon's territory.

iv. Retail and UNE Rate Adjustments

71 The cost of the shared loop has traditionally been recovered only through the prices

⁵⁹ Ex. T-1 at page 18 (Fitzsimmons).

⁶⁰ *Post Hearing Brief of Verizon* at para. 44.

for voice services. Some parties in this proceeding argued that if the Commission were to establish a non-zero price for the HUNE, the ILECs will be permitted to double recover a portion of the cost of the loop. In order to address this concern we requested that parties address in their briefs whether the Commission has the latitude to require a credit to retail services in light of the Qwest merger order and other relevant factors, if it also sets a positive price for the HUNE.⁶¹ We share the concern of some parties regarding possible windfall profits to incumbent LECs if a positive recurring price is adopted.

72 In response, both Commission Staff and Public Counsel support providing a credit to customers in the event that the Commission establishes a non-zero price for the high frequency portion of the loop.⁶² They point out that rate changes are permitted under the Qwest merger agreement as long as they are revenue neutral. The credit would be revenue neutral and, according to these two parties, consistent with the agreement. Public Counsel argues that the Commission has the means to prevent a windfall to Qwest.

73 According to Public Counsel, the settlement in the U S West/Qwest merger does not appear to preclude the Commission from addressing this issue as to Qwest. Public Counsel argues that the agreement approved by the Commission allows either the Commission Staff or Public Counsel to seek rate changes to accomplish revenue-neutral rate rebalancing.⁶³ Any action taken to adjust rates based on changes in contributions to loop costs would presumably take place in a revenue neutral fashion. The goal would be to avoid a double recovery of loop costs by "rebalancing" new revenues received from the HUNE recurring charge with reductions in basic voice

⁶¹ The Qwest Merger Order established a rate freeze but does allow for the possibility of revenue neutral rate changes. *In re Application of U S West, Inc. And Qwest Communications International, Inc. for An Order Disclaiming Jurisdiction, or in the Alternative Approving the U S West, Inc., - Qwest Communications International Merger*, Ninth Supplemental Order, Docket No. UT-991358 (June 19, 2000) ("Qwest Merger Order").

⁶² *Opening Brief of Commission Staff* at para. 32.

⁶³ Qwest Merger Order, Appendix A, pp. 9-10. The Verizon merger agreement (GTE/Bell Atlantic) has similar language. *In the Matter of the Application of GTE Corporation and Bell Atlantic Corporation For An Order Disclaiming Jurisdiction or In the Alternative Approving the GTE Corporation - Bell Atlantic Merger*, Fourth Supplemental Order, Docket No. UT-981367 (December 16, 1999), Appendix A, p. 6.

grade services, rather than to change overall revenue levels.⁶⁴

74 Qwest disagrees with Public Counsel and argues that the Commission cannot require a credit to retail services in light of the Qwest merger: With regard to the issue of a credit to retail rates, Qwest argues that the merger settlement agreement precludes the Commission from currently considering a credit to retail customers or services, and cites the merger settlement agreement as follows:

Prior to January 1, 2004, neither Commission Staff nor Public Counsel shall initiate, nor support any third-party in a request for the Commission to initiate, any complaint proceeding regarding the overall revenue or earnings level of the Company. Prior to January 1, 2004, the Commission may not otherwise take any action that would change the retail prices or access rates of the Company.⁶⁵

75 Covad/Rhythms, TRACER, and Qwest agree that a credit could not or should not be given. First, TRACER believes that the moratorium on rate changes stated in the merger agreement prevents any adjustments to the retail rates. Secondly, TRACER questions whether the Commission has jurisdiction over this revenue. TRACER argues that Qwest's DSL services are interstate, and the costs for those services are recovered through interstate jurisdiction.⁶⁶ Therefore, any cost for the HUNE imputed to Qwest's MegaBit services would technically be a part of the interstate access service. Absent an actual 'payment' from Qwest to its intrastate operations, there would be no money available for the offset.⁶⁷

⁶⁴ *Opening Brief of Public Counsel (Part A)* at pp. 10-11.

⁶⁵ *Opening Brief of Qwest Corporation* at para. 66.

⁶⁶ TR 223:2-23 (Fitzsimmons).

⁶⁷ *Opening Brief of Tracer* at para. 24.

- 76 Covad/Rhythms opposes the offset on the grounds that it would impose unnecessary transaction costs. According to Covad/Rhythms, parties would have to establish a billing arrangement whereby subscribers to xDSL services would receive a credit on their bills for obtaining xDSL service, thus imposing large transaction costs on ILECs. The customers who receive that credit would effectively be paying the same amount of money so the net effect on the total revenue received from retail services would remain unchanged, but additional transaction costs would be incurred.
- 77 Covad/Rhythms argues that a positive HUNE price accompanied by an equal offset to the voice rate paid by the customer to Qwest would only harm consumers. It would increase costs associated with the provision of line sharing without providing any benefits to consumers, and as such should be rejected. Covad/Rhythms argues that such a mechanism would make consumers no better off than a \$0 HUNE price, because the amount paid by the consumer for both services would thus not change. The only exception is that both voice and DSL prices could rise due to the increased regulatory and transaction costs required to achieve this result, thereby harming consumers.⁶⁸
- 78 Covad/Rhythm's second reason for opposing the credit is that it would create confusion for customers.⁶⁹ Customers receiving the same service would pay different rates. A customer who obtains xDSL service would receive a credit for their basic exchange service. Consequently, two customers obtaining the same basic exchange service would be paying different rates.
- 79 Finally, Covad/Rhythms argues that establishing a non-zero price for the Qwest HUNE but a zero price for the Verizon HUNE would complicate a CLEC's marketing plans. Under such a system there would be a need to distinguish between the potential customers in these two areas and offer each of them different rates. Complicating CLECs' operations in Qwest's territory, the credits would effectively raise the price of entering the Qwest territory when compared to competing in Verizon territory because CLECs' marketing plans will have to distinguish between Qwest and Verizon service areas.

⁶⁸ *Part A Post Hearing Brief of Covad/Rhythms* at para. 53.

⁶⁹ *Part A Post Hearing Brief of Covad/Rhythms* at para. 54.

80 According to Covad/Rhythms, such a result constitutes a barrier to entry, and along with increased administrative costs that raise the cost of providing xDSL service will only make high-speed data services less accessible to Washington consumers and increase the digital divide in the state.⁷⁰

81 Qwest further argues that the Act requires that rates for unbundled network elements be based on cost and that the rates be set with no reference to retail rates. In Docket No. UT-960369, et al., the Commission found that the price of unbundled network elements had to be established without any reference to retail rates.

As for U S West's proposed markup to recover what it refers to as non-attributable common costs, further examination indicates that this proposal is a variation on Staff's parity pricing proposal. Given the FCC's explicit language stating that retail costs may not be used in setting rates, the Commission finds that U S West's proposed markup is contrary to federal law and denies the proposed markup.⁷¹

82 Qwest contends that setting the price with a credit would violate this standard because it would take into account retail rates in the establishment of a HUNE price.

83 Qwest also argues that the question whether the Commission has discretion to require a credit to retail services implicitly assumes that revenues will increase due to the provision of xDSL service. According to Qwest, this assumption is not supported on the record, and it is premature to make such a finding because it is possible that revenues could *decrease* if customers use one DSL line to obtain multiple voice connections or if the availability of xDSL causes a decrease in demand for second lines to facilitate access to the Internet.

84 We do not find Qwest's analogy to Docket No. UT-960369 compelling because the Commission establishes the HUNE price independent of retail prices. This differs from the question in Docket No. UT-960369 where the Commission was asked to set the unbundled loop price based on retail prices.

⁷⁰ *Id.* at para. 55.

⁷¹ See *In the Matter of the Pricing Proceeding for Interconnection, Unbundled Elements, Transport and Termination, and Resale*, Docket Nos. UT-960369 et al., 17th Supp. Order: Interim Order Determining Prices (Aug. 30, 1999) ("17th Supplemental Order") at para. 179.

85 We find that it is premature at this time to determine whether a non-zero price for the HUNE will lead to over-earnings on a regular basis. The issue of over-earnings will instead be handled in the next docket that addresses Qwest's or Verizon's earnings.

2. Operations Support Systems

a. Background

86 The objective of the Telecommunications Act of 1996 was to "provide for a pro-competitive, de-regulatory national policy framework designed to accelerate rapidly private sector deployment of advanced telecommunications and information technologies and services to all Americans by opening all telecommunications markets to competition" ⁷² A fundamental requirement of this Act imposes on the ILECs the obligation to provide their competitors with access to unbundled network elements.

87 Congress left it to the FCC to enact the rules that would specify which network elements would be available to CLECs. In defining the network elements that ILECs must offer, the FCC specifically included "[o]perations support systems functions consist[ing] of pre-ordering, ordering, provisioning, maintenance and repair, and billing functions supported by an incumbent LEC's databases and information." ⁷³ Operations Support Systems are used by telephone companies -- both CLECs and ILECs -- to provision plant, to process service orders, to manage service connections, disconnections, moves and changes, and to track network maintenance. OSS consists of computer hardware, and software, such as databases.

88 The 1996 Telecommunications Act establishes the pricing standard for network elements:

Determinations by a State commission of the just and reasonable rate for the interconnection of facilities and equipment for purposes of subsection (c)(2) of section 251, and the just and reasonable rate for network elements for

⁷² H.R. Conf. Rep. No. 104-458, 104th Cong., 2d Sess. 13 (1996).

⁷³ 47 C.F.R. § 51.319(f)(1).

purposes of subsection (c)(3) of such section--

(A) shall be--

(i) based on the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing the interconnection or network element (whichever is applicable), and

(ii) nondiscriminatory, and

(B) may include a reasonable profit.⁷⁴

89 In the previous generic cost proceeding, Docket No. UT-960369, this Commission determined that because OSS is a network element, CLECs should pay reasonable costs of modifying OSS to support a competitive environment.⁷⁵ In that decision the Commission elected to set interim rates for OSS cost recovery because it was determined that neither Qwest nor Verizon had provided adequate documentation or support for their OSS costs.⁷⁶ Consequently, the Commission ordered both companies to provide additional information supporting their requests to be compensated for the costs incurred in modifying their OSS for use by CLECs.⁷⁷

90 In response to the 17th Supplemental Order, Qwest and Verizon presented testimony and supporting documentation that described how their operations support systems were modified in order to support CLEC access. Included in the submissions were estimates of the recurring and one-time costs associated with making the OSS functions available to CLECs.⁷⁸ The ILECs contend that they have presented

⁷⁴ Section 252(d)(1) of the Act.

⁷⁵ 17th Supplemental Order at para. 98.

⁷⁶ Due to Qwest's inability to precisely define what would be the level of charges associated with a local service request, the Commission effectively set an interim rate of zero. Docket No. UT-960369, 26th Supplemental Order at para. 29.

⁷⁷ 17th Supplemental Order at para. 108.

⁷⁸ *See, e.g.*, testimony of Holland (Verizon), Casey (Verizon), and Brohl (Qwest).

sufficient evidence to establish the accuracy and validity of their OSS cost estimates.⁷⁹

b. Issues

i. Should OSS Transition Costs be Recovered from the CLECs?

91 In this proceeding the Joint CLECs disagree with the principle of recovering OSS transition costs solely from CLECs.⁸⁰ The Joint CLECs argue that neither Qwest nor Verizon should be permitted to recover their one-time start-up cost in the UNE rate for OSS because the ILEC cost studies do not conform to TELRIC principles. Specifically, they argue that these cost studies fail to satisfy the requirements adopted by Congress, the FCC, and this Commission that the costs be forward looking. According to the Joint CLECs, Verizon and Qwest should not be permitted to recover the costs associated with upgrading their OSS to allow for a multi-provider environment because "TRILIC already assumes a multi-provider environment."⁸¹

92 Verizon responds that this argument has already been dismissed by this Commission.⁸² Verizon cites to the 17th Supplemental Order at para. 98, wherein the Commission ruled that § 251(d)(1) of the 1996 Telecommunications Act entitles ILECs to recover reasonably incurred costs associated with their wholesale operations. Verizon also contends that this Commission's ruling on this matter is consistent with federal court rulings in Delaware, Kentucky, and North Dakota.⁸³

⁷⁹ *Opening Brief of Qwest Corporation* at para. 98; *Post Hearing Brief of Verizon* at para. 75.

⁸⁰ Transition costs are associated with converting the OSS so that the ILEC's back-office operations are accessible to the CLECs. An ILEC incurs transaction-specific costs each time a CLEC places an order. 17th Supplemental Order at para. 89.

⁸¹ Joint CLEC *Part A Post-Hearing Brief* at para. 33.

⁸² *Verizon Reply Post Hearing Brief* at para. 41.

⁸³ *Verizon Reply Post Hearing Brief* at para. 42-44.

ii. Sufficiency and Accuracy of OSS Cost Estimates

93 In addition to concerns about the principle of who would be held accountable for OSS cost recovery, parties also dispute the amount to be recovered. Commission Staff expresses concern over the amount of startup costs that Qwest proposed to recover. Staff argues that the amount of OSS startup costs Qwest intends to recover is excessive.

94 According to Staff, Qwest improperly relied on estimates of its 1999 expenses, rather than on actual 1999 expenses, in determining the amount of costs it should recover.⁸⁴ The estimated 1999 expense factor for Account 6724 was \$979.8 million. However, Qwest's 1999 ARMIS report shows that the Company actually booked \$623 million to that account in 1999.⁸⁵

95 Qwest attributes this difference to a change in accounting practices that resulted in the reclassification of \$318 million of expenditures to capital accounts. According to Qwest, if 1999 dollars had been booked on the same basis as in prior years, Qwest would have reported \$950 million in Account 6724 expenses.⁸⁶

96 Commission Staff also expresses concern that Qwest inflates the amount of money to be recovered, by attributing "business fees, product management costs, administrative costs, and attributed costs" to OSS. Staff believes that it is inappropriate to include these costs in a one-time startup charge.⁸⁷

97 In response testimony, Qwest points out that this Commission has already approved the inclusion of attributable costs in cost studies. However, Staff maintains that the Commission's prior decisions dealt with recurring and non-recurring cost studies and therefore was not controlling for this type of one-time, startup expense:

[T]he Commission's ruling addressed the inclusion of these costs in cost

⁸⁴ See Exh. 93.

⁸⁵ *Opening Brief of Commission Staff* at para. 37. See also Exh. T-350 at 3.

⁸⁶ *Reply Brief of Qwest* at para. 29.

⁸⁷ *Opening Brief of Commission Staff* at para. 38.

studies that were used to determine the direct costs of unbundled network elements, which would be recovered through non-recurring and recurring charges. The determination of the cost of a one-time expense does not require a cost study. For this reason, the Commission Staff does not believe that the Commission ruling in paragraph 126 of the 25th Supplemental Order applies to the one-time expenses of modifying the OSS to provide access to competitors. The determination of the cost of a one-time expense does not require a cost study.⁸⁸

98 In response, Qwest renews its assertion that these costs were properly included in its OSS cost studies, and argues that the Commission ruled in the 25th Supplemental Order in Docket UT-960369, at para. 126, that it was appropriate to include these costs in Qwest's TELRIC studies.⁸⁹

iii. Need for an Audit

99 The Joint CLECs request that the Commission order an independent audit to verify the accuracy of the cost estimates produced by Qwest and Verizon. They imply that the ILECs should bear the cost of an independent audit because neither they nor the Commission has the resources to ensure the accuracy of the ILECs' data.⁹⁰

100 Staff also argues in favor of conducting an audit of the ILECs' OSS startup costs. Staff states that the ILECs were unable to provide any confirmation or assessment of the reasonableness of the claimed OSS expense levels or the extent to which these expenditures benefitted the ILECs. Therefore, in order to prevent imposing unfair charges on the entrants, an audit "appear(s) to be necessary at this time."⁹¹

⁸⁸ *Opening Brief of Commission Staff* at para. 39.

⁸⁹ *Reply Brief of Qwest* at para. 30.

⁹⁰ *Joint CLEC Part A Post-Hearing Brief* at para. 37.

⁹¹ *Opening Brief of Commission Staff* at para. 44-45.

101 The ILECs maintain that an audit is unnecessary. Qwest states that it provided the necessary documentation for its proposed rates, and therefore the Commission should deny the other parties request to further delay Qwest's recovery of its costs.⁹² Verizon adds that "neither party explains why the adjudication process—complete with the opportunity to conduct discovery—was not sufficient in this context while it is in every other cost proceeding."⁹³

102 The Joint CLECs contend that there is a significant difference between OSS and other cost studies that justifies the need for an audit:

[U]nlike every other UNE or facility for which the Commission has been asked to establish a price, the OSS rates the ILECs have proposed seek recovery of expenditures, not forward-looking costs. In other words, Qwest and Verizon are asking to be reimbursed for what they have actually paid in the past, not to be compensated for costs they reasonably can be expected to incur in the future.⁹⁴

103 Verizon and Qwest also express concerns about how much an audit would cost and who would pay for it. Because the benefits of an audit would extend beyond both firms' operations in Washington, it is unsettled whether a disagreement exists over who would bear the cost of such an undertaking.⁹⁵

104 Nextlink does not believe the multi-jurisdictional benefit is a legitimate reason to not undertake an audit. Nextlink suggests that the cost of the audit could be recovered along with the other legitimate OSS transition expenses. Furthermore, it suggests that the costs of the audit, like the other expenditures, should be apportioned on a *pro rata* basis.⁹⁶

105 Staff also expresses concern over the accuracy of Qwest's service order forecasts. Qwest proposes to convert OSS transition costs to a per-unit rate by dividing total OSS expenses by the forecasted number of wholesale service orders. Qwest

⁹² Reply Brief of Qwest at, para. 26.

⁹³ *Post Hearing Brief of Verizon* at para. 57.

⁹⁴ Joint CLEC *Part A Post-Hearing Brief* at para. 16.

⁹⁵ *Opening Brief of Qwest Corporation* at para. 100; *Post Hearing Brief of Verizon* at para. 85.

⁹⁶ Joint CLEC *Part A Post-Hearing Brief* at para. 17.

estimated that it will process over 16 million orders over six years.⁹⁷ It is Staff's opinion that this forecast is low relative to Qwest's 14 million access lines. Staff attributes this disparity either to Qwest underestimating their competitive losses or to a significant underestimation of the number of service orders.⁹⁸

106 Qwest argues that its estimates are reasonable. Qwest contends that its 16 million order forecast is consistent with the prospect that it could lose significant market share over the next six years. Qwest also notes that Staff does not propose any other estimate as an alternative.⁹⁹

iv. Cost Recovery Mechanism

107 The dispute over OSS recovery extends beyond a discussion of the appropriateness of recovering these costs from the CLECs and the level of costs incurred by the ILECs. The parties also disagree over the degree to which these costs have already been recovered in the ILECs' retail charges and over whether there should be an end-user surcharge to collect reasonably incurred expenditures.

(1) Retail Rates

108 In the 17th Supplemental Order, this Commission directed the ILECs to address the degree to which their OSS transition costs have already been recovered through their retail rates. The Commission stated that "To the extent these costs have been recovered through retail rates, the parties should address whether the revenue should be rebated to retail customers."¹⁰⁰

109 In direct testimony, both Qwest and Verizon take the position that they are not recovering any OSS startup costs in their retail rates because neither company has had a rate case before the Commission since 1997 and 1985, respectively. Qwest witness Million contends that because retail rates in Washington are based on a 1997

⁹⁷ *Reply Brief of Qwest* at para. 32.

⁹⁸ *Opening Brief of Commission Staff* at para. 41.

⁹⁹ *Reply Brief of Qwest* at para. 32.

¹⁰⁰ 17th Supplemental Order at para. 110.

rate case that included costs incurred before the period for which U S WEST seeks recovery, 1997-1999, of its OSS development and enhancement costs, the OSS development costs could not have been recovered through U S WEST's retail rates.¹⁰¹ Qwest also argues that the rates for UNEs should be established independently of any rate-of-return considerations. It contends that this cost docket is not the appropriate forum for an investigation of the Company's rate-of-return.¹⁰²

110 Verizon also points out that it has not had a rate case since 1985 and therefore retail rates could not have been established to recover any OSS transition costs. Furthermore, Verizon claims that its transition costs were tracked separately on a nationwide basis and were excluded from the factors used for pricing development.¹⁰³

111 Verizon witness Tanimura acknowledges that a 1998 test year was used recently in a rate review in docket UT-9813167. In that proceeding Tanimura asserted that a settlement disposed of three separate dockets — GTE/Bell Atlantic's merger application, intrastate access reform, and an earnings review. As part of that settlement, Verizon agreed to a revenue decrease of \$30 million. Tanimura testifies that "there is specific language in the Commission Order and adopted settlement agreement that unfunded mandates (such as OSS enhancements) could be recovered in the future."¹⁰⁴

112 Tanimura does not claim that the OSS costs were excluded from the 1998 test year. Nevertheless he argues that it is appropriate to establish an OSS rate without simultaneously providing a rebate to residential customers because rate reviews deal with snapshots of a company's expenses and revenues during a test year. Tanimura contends that OSS transition costs "are developmental costs and as such are incurred before the technology is implemented and the costs are recovered. As with all developmental costs there is normally a time lag between the cost generation and the cost recovery."¹⁰⁵ Tanimura offers an analogy between OSS and the development of

¹⁰¹ Exh. T-90 at 13.

¹⁰² *Id.* at 14.

¹⁰³ Exh. 237 at p. 11.

¹⁰⁴ *Id.* at pp. 9-10.

¹⁰⁵ *Id.* at p. 10.

a new retail service:

An analogous situation occurs for Verizon NW's new service deployment. Suppose that in 1998, there were cash expenditures for the establishment of a new service that would go into service in 1999. Although the costs were incurred and booked in 1998, this does not imply that the new service would not have to recover these costs when it goes into service in 1999. There is often a timing difference between the development of a new service and the recovery of the costs of the service. The fact that no one has ever argued that the cost of a new service that was incurred previous to the actual service rollout has already been recovered supports Verizon NW's position that this is a timing issue, not double recovery.¹⁰⁶

- 113 In Staff's view, the ILECs' analysis is insufficient to justify their positions. Staff contends that both companies' earnings exceed their respective authorized rates of return and therefore the current revenues are sufficient to permit recovery of OSS startup costs.¹⁰⁷
- 114 Staff further notes that when Verizon's rate levels were reviewed in Docket No. UT-981367, the reported expenses included Verizon's 1998 startup OSS transition expenses. Staff therefore concludes that "all OSS startup costs. . . have already been recovered in [Verizon's] current retail rates."¹⁰⁸
- 115 Commission Staff notes that Qwest's accounting practices are distinguishable from those of Verizon,¹⁰⁹ and that Qwest's rate levels were last set by the Commission in Docket No. UT-970766 using a 1996 test year. Staff states that Qwest appears to have excluded the 1996 OSS expenses from the amount of OSS startup costs requested for recovery in this case. Nevertheless Staff recommends that if Qwest is permitted to recover its OSS transition expenses, a credit should be provided to other OSS rate elements because Staff believes that Qwest's rate of return exceeds its

¹⁰⁶ *Id.* at p. 11.

¹⁰⁷ *Opening Brief of Commission Staff* at para. 48; *see also* Exh. T-350 at p. 8.

¹⁰⁸ Exh. T-350 at p. 8.

¹⁰⁹ Staff did not present evidence on the earnings level of Verizon. Ex. T-350.

authorized rate of return.¹¹⁰

- 116 Finally, Staff points out that under the ILECs' recent merger settlements, the Commission agreed not to initiate or support complaints against the ILECs' retail rates. Staff notes, however, that the merger agreements do not preclude the Commission from accomplishing revenue-neutral rate rebalancing. Staff believes that a decrease in retail or wholesale rates would be revenue-neutral and therefore would not violate the merger agreements.¹¹¹
- 117 Qwest responds by stating that "revenue neutral rate rebalancing can only be accomplished when existing rates are changed, not in the establishment of a new rate and forced imposition of a credit." Qwest adds that "the conclusion that such an exercise would indeed be revenue-neutral is premised on facts that are not established in this record."¹¹² Qwest argues that the full impact of competition is not established in the record, and that there is no foundation for the conclusion that the OSS transition charge, when combined with a credit, would be revenue-neutral.
- 118 Verizon disagrees with Staff's position because of the statutory requirements of the 1996 Telecommunications Act. Commission Staff asserts that both Qwest and Verizon are experiencing earning levels that exceed their authorized rates of return.¹¹³ Verizon argues in response:

If Staff's argument was carried to its logical extreme, there would be no need for any cost dockets under the Act because retail rates potentially would recover the costs to provide all UNEs and collocation. . . Moreover § 251(d)(1)'s requirement that UNE rates be set without reference to a rate of return or other rate-based proceeding makes very clear that Staff's analysis is misplaced in this docket.¹¹⁴

¹¹⁰ *Id.* at pp. 9-10.

¹¹¹ *Opening Brief of Commission Staff* at para. 50.

¹¹² *Reply Brief of Qwest* at para. 35.

¹¹³ *Opening Brief of Commission Staff* at para. 48.

¹¹⁴ *Reply Post Hearing Brief of Verizon* at para. 53.

(2) *End-User Surcharge*

- 119 The Joint CLECs propose recovering OSS transition costs from all end users of telecommunications services. They argue that both Congress and the Washington State Legislature have determined that consumers benefit from a competitive environment, and that the FCC has found that development of effective competition depends on the ability of competitors to have access to an ILEC's OSS. According to the Joint CLECs, the costs incurred to modify legacy monopoly systems represent the costs of a change in regulatory paradigm for the public good, not costs incurred to benefit CLECs. On that basis they argue that these costs should be recovered from telecommunications consumers as a whole, not by CLECs and their customers alone.¹¹⁵
- 120 The Joint CLECs point out that the California Commission concluded that it is equitable to recover the OSS transition costs from all end-users, not just the CLECs. According to the CLECs, the California Public Utility Commission found that whereas OSS transition costs are incurred to promote competition, and because competition will benefit all customers, it is, reasonable to employ an end-user surcharge to recoup these costs from all customers on a competitively neutral basis.¹¹⁶
- 121 Qwest responds to this proposal by stating that an end-user surcharge would be in direct conflict with this Commission's findings in the 17th Supplemental Order, which requires CLECs to bear the costs of OSS modifications.¹¹⁷ Qwest also states that the California decision is not an appropriate analogy because it is the result of a settlement agreement where all parties agreed to a competitively neutral cost recovery mechanism, and here, that is clearly not the case.¹¹⁸
- 122 The Joint CLECs also cite the FCC's First Report and Order on number portability to support the proposition that the transition costs should be recovered from all retail customers, not just the CLECs. In that order, the FCC required that a competitively neutral cost recovery mechanism for interim local number portability should not give one service provider an appreciable incremental cost advantage over another service

¹¹⁵ Joint CLEC *Part A Post-Hearing Brief* at para. 39; *See also* Exh. T-150 at pp. 5-6.

¹¹⁶ Joint CLEC *Part A Post-Hearing Brief* at para. 40-41.

¹¹⁷ *Opening Brief of Qwest Corporation* at para. 104.

¹¹⁸ *Reply Brief of Qwest* at para. 38.

provider. Neither should the mechanism "have a disparate effect on the ability of competing service providers to earn a normal return."¹¹⁹

123 Qwest responds that while the FCC specifically ordered a cost recovery mechanism for interim number portability where costs were recovered from all consumers, the FCC deliberately chose not to order that the recovery of OSS transition costs should be spread among all consumers. Therefore, according to Qwest, the FCC's actions support a finding that the OSS transition costs should be recovered from the CLECs.¹²⁰

124 Finally, the Joint CLECs ask that the Commission open a new docket that deals with establishing a competitively neutral cost recovery mechanism for OSS costs. They state that if a competitively neutral rate is adopted, local competition in Washington will be promoted.¹²¹ Qwest responds that opening a new docket to consider a competitively neutral recovery mechanism will merely delay a final resolution and deny ILECs the chance to recover OSS costs.¹²²

(3) ILEC OSS Surcharge Rate Design

125 Verizon proposes to establish an OSS charge to be implemented on each Local Service Request (LSR) accepted by Verizon to provide services to a CLEC. Verizon

¹¹⁹ Joint CLEC *Part A Post-Hearing Brief*, para. 43, citing *In the Matter of Telephone Number Portability*, CC Docket 95-116, First Report and Order and Further Notice of Proposed Rulemaking, FCC 96-286, (Released July 2, 1996) ("*FCC Number Portability Order*") at para. 210.

¹²⁰ *Reply Brief of Qwest* at para. 38.

¹²¹ Joint CLEC *Part A Post-Hearing Brief* at para. 47.

¹²² *Reply Brief of Qwest* at para. 37.

suggests that the price of the per-LSR charge be determined by dividing the total OSS transition costs by the forecasted CLEC LSRs.¹²³

126 Qwest proposes to establish an OSS charge in a similar manner, but the charge would be implemented on each service order generated by the CLECs in Qwest's territory. Qwest's plan would divide its total OSS costs by the forecasted number of service orders to determine OSS charges. The fundamental difference here is the number of service orders generated by a single LSR. One LSR could generate one service order, as is the case when a new unbundled loop is ordered, or 30 or more when multiple existing loops are ordered. Therefore, Qwest's service order recovery mechanism will result in a greater number of individual unit charges per CLEC transaction.

127 Qwest argues in favor of this mechanism to recover its OSS costs because service order volumes are "predictable, have been tracked for decades, have systems and processes in place for reporting purposes, and are predictable from line loss forecast."¹²⁴ Qwest also claims that this methodology more effectively places the burden of cost recovery on the CLECs who use Qwest's OSS more intensely, and keeps the "per unit" charges lower than a per-LSR charge would.¹²⁵

128 The Joint CLECs disagree with Qwest's proposed surcharge rate design for several reasons: 1) Qwest's proposal to charge CLECs on a per "service order" basis is identical to the interim OSS cost recovery proposal the Commission rejected in UT-960369; 2) Qwest fails to demonstrate that the method used to estimate the prospective number of service orders in the development of the proposed OSS charges is consistent with the method by which Qwest intends to bill its customers; and 3) Qwest's OSS witness in this docket, as in the prior proceeding UT-960369, is unable to state exactly when service order charges would apply.¹²⁶

¹²³ *Post Hearing Brief of Verizon* at para. 86.

¹²⁴ *Opening Brief of Qwest Corporation* at para. 105.

¹²⁵ *Id.* at para. 108.

¹²⁶ *Joint CLEC Part A Post-Hearing Brief* at para. 50.

129 Qwest responds that although no other party has suggested an alternative recovery method, as long as Qwest is able to recover the costs it has incurred to modify its OSS for the benefit of the CLECs, it is willing to entertain alternative methods of recovery.¹²⁷

130 Staff and the Joint CLECs express concern that a surcharge rate design could act as a barrier to entry if the rate is set too high. Staff recommends that a maximum local service request fee of \$5.00 per transaction be implemented, in order to prevent the fee from acting as a barrier to entry.¹²⁸ The Joint CLECs conclude that a per LSR charge "is the lesser of two evils" if the CLECs are to be the only party responsible for paying for the OSS costs.¹²⁹

v. Allocation Issues and Line Sharing

(1) Number of Lines/Demand Assumption

131 Verizon proposes to recover OSS transition and transaction related expenses based on a projected demand of 17.375 million LSRs, which it forecasts to be processed over the five years running from 2001 - 2005. This forecast covers LSRs across the former GTE service territories throughout the United States during this same time period. Verizon adds that "[t]his demand estimate, however, is subject to a substantial degree of uncertainty. Given the uncertainty, Verizon proposes to recover the OSS transition costs through the \$3.27 per LSR charge until the projected 17.375 million orders have been processed."¹³⁰

132 Verizon also proposes recovery of OSS transaction costs using the same average annual LSR forecast (3.475 million), but to be recovered annually. Verizon proposes to recover its claimed annual OSS transaction costs (\$13.1 million) each year through

¹²⁷ *Opening Brief of Qwest Corporation* at para. 107.

¹²⁸ *Opening Brief of Commission Staff* at para. 53.

¹²⁹ *Joint CLEC Part A Post-Hearing Brief* at para. 20.

¹³⁰ *Post Hearing Brief of Verizon* at para. 89.

a \$3.76 per LSR charge.¹³¹ Because the transaction costs are ongoing, Verizon proposes no termination point for this charge.¹³²

133 Staff points out that Verizon has determined the Washington portion of its OSS transition recovery costs to be \$1.9 million. Furthermore, Staff believes Verizon's charge would be reasonable.¹³³ However, Staff does suggest that if "the Commission wishes to use forecasted service orders for Qwest and Verizon OSS cost recovery calculations, it should look either to other RBOCs' post 271 service order experience or to the market share experience of AT&T from 1984 to 1990."¹³⁴ Staff further argues that the Commission should permit Qwest and Verizon to recover only those OSS startup costs that are attributable to Washington.¹³⁵

134 In response to these criticisms Verizon states that "Staff does not explain why there is any reason to believe that Verizon will receive the same service order volume in Washington as a different company with different service territory characteristics in other states."¹³⁶ Verizon further contends that because the costs were incurred for its national operations, and are not directly attributable to any one state, it is appropriate to recover the costs in proportion to the level of CLEC activity in each state.¹³⁷

¹³¹ Verizon also requests the recovery of a third type of transition cost—costs specific to its National Open Market Center ("NOMC"). This is not an OSS related cost. Rather, according to Verizon, it is a "infrastructure [cost] necessary for customer service representatives to receive and process CLEC orders . . ." The Company proposes a charge of \$4.92 per LSR for the recovery of the NOMC cost. *Post Hearing Brief of Verizon* at para. 98-99. No party raises a specific objection to the NOMC charge other than the general concern that such fees act as a barrier to entry. *See*, for example, *Opening Brief of Commission Staff* at para. 53. Qwest does not request a similar charge.

¹³² *Post Hearing Brief of Verizon* at para. 90.

¹³³ *Opening Brief of Commission Staff* at para. 43.

¹³⁴ *Id.* at 41.

¹³⁵ *Id.* at para. 51.

¹³⁶ *Post Hearing Brief of Verizon* at para. 60.

¹³⁷ *Id.* at para. 61.

(2) Length of Time-Depreciation Life

135 Covad and Rhythms object to the service life used in Qwest's cost study.¹³⁸ While the authorized depreciation life is 5.8 years, Qwest uses a shorter period of five years.¹³⁹ Qwest responds that the five-year life it uses is reasonable when compared with the estimated depreciation life for general purpose computers which is 5.8 years.¹⁴⁰ Verizon states that the length of time to recover OSS transition cost is not important to its proposal because the charges would stay in effect until the appropriate level of costs are recovered.¹⁴¹

(3) Allocation of OSS Costs Over Other Loops

136 In this proceeding the DLECs, Covad and Rhythms, contend that Qwest should rely on their MegaBit demand numbers in developing demand assumptions for line sharing that underlies Qwest's proposed Line Sharing OSS cost recovery proposal. They also argue that the MegaBit numbers are likely to be the best starting point to estimate future demand for shared lines because, prior to line sharing, MegaBit was the only xDSL product available to consumers in Qwest's territory that utilized the consumer's existing phone line.¹⁴²

137 In response, Qwest argues that the provision of MegaBit service is not relevant to the issue at hand because it does not provide service through a separate affiliate, nor will it in the foreseeable future. Consequently, the volume of Qwest's retail transactions would be of questionable merit in forecasting the demand of CLECs.¹⁴³

138 Covad and Rhythms also argue that the Commission should allocate OSS Line

¹³⁸ Staff also expressed its objection to Qwest's capital recovery factor. *Opening Brief of Commission Staff* at para. 40.

¹³⁹ Covad and Rhythms *Part A Post Hearing Brief* at para. 96.

¹⁴⁰ *Opening Brief of Qwest Corporation* at para. 116.

¹⁴¹ *Post Hearing Brief of Verizon* at para. 91.

¹⁴² Covad and Rhythms *Part A Post Hearing Brief* at para. 95.

¹⁴³ *Opening Brief of Qwest Corporation* at para. 118.

Sharing costs over all the loops carrying DLS service, not just those shared by CLECs.¹⁴⁴ In support of this position they offer some of the same arguments that the Joint CLECs make when they argue that OSS costs should be recovered from all retail customers. That is, "because all users of shared lines are buyers in the same market, they all derive immediate benefit from competition on price and quality, all of which is enabled by improved OSS. Under such circumstances, if all xDSL customers benefit, all xDSL customers should pay a portion of the cost."¹⁴⁵

139 Furthermore, Covad and Rhythms argue that the Commission should implement a recovery mechanism that is least discriminatory and serves the public interest by promoting the development of efficient competition. In order to avoid a price squeeze that would foreclose entry, they contend that any OSS charge should apply to customers of ILECs and CLECs equally.¹⁴⁶

(4) OSS Cost Recovery for Line Sharing

140 Qwest proposes a special surcharge for the recovery of OSS costs related to line sharing. Qwest claims to have incurred \$11.9 million in direct costs in order to modify its OSS for line sharing.¹⁴⁷

141 Covad and Rhythms contend that Qwest fails to substantiate its proposal for OSS cost recovery. They argue that Qwest relies on a formal proposal for a contract issued by Telcordia, not an executed contract. Furthermore, Covad and Rhythms aver that Qwest has not submitted adequate documentation to support its claim that 85% of the costs associated with the proposed contract is caused by the CLECs.¹⁴⁸

¹⁴⁴ Covad and Rhythms *Part A Post Hearing Brief* at para. 98.

¹⁴⁵ *Ibid.*

¹⁴⁶ *Id.* at para. 99.

¹⁴⁷ *Opening Brief of Qwest Corporation* at para. 101.

¹⁴⁸ Covad and Rhythms *Part A Post Hearing Brief* at para. 89-92.

142 Qwest responds that the DLECs merely requested a copy of its contract with Telcordia, and did not specify that it be an executed copy of the document. Qwest adds that it has "provided sworn testimony by Ms. Brohl that established that Qwest indeed did incur the OSS costs for line sharing (Ex. T-109 at 32)."¹⁴⁹ Qwest stated that the 85% value was provided by its vendor, Telcordia, and that Telcordia did not provide a breakdown of the how the 85% cost estimate was derived.¹⁵⁰

143 Verizon does not seek cost recovery for OSS upgrades specific to line sharing in this proceeding because these costs have not yet been quantified. Verizon seeks to reserve its right to request such recovery once these costs are quantified.¹⁵¹

c. Discussion and Decision

i. Level of Cost Recovery

144 Qwest and Verizon request that rates be established to recover their OSS transition costs. In the 17th Supplemental Order the Commission determined that CLECs are responsible for compensating the ILECs for reasonably incurred costs and charged the ILECs with showing in this proceeding that their proposed rates were reasonable.¹⁵²

145 The following Table provides information on the level of transition costs recovery requested by Qwest and Verizon.¹⁵³

¹⁴⁹ *Reply Brief of Qwest* at para. 41. Strictly speaking, the citation provided by Qwest does not support its assertion. Ms. Brohl testified that Qwest "will incur" \$11,956,000 in OSS costs, not that these costs had been incurred.

¹⁵⁰ Exh. 118 and Exh. 120.

¹⁵¹ *Post Hearing Brief of Verizon* at para. 59.

¹⁵² 17th Supplemental Order at para. 98-112.

¹⁵³ The Commission takes official notice of Qwest's and Verizon's Washington-specific 1999 total access line data at line (6), as provided in FCC ARMIS Report 43-08 at the URL stated in Note (e).

TABLE 1: Comparison of Proposed OSS Transition Costs Recovery

	Issue	Qwest	Verizon	Notes
(1)	OSS National Start-up Costs	\$121.8 million	\$56.7 million	(a)
(2)	OSS Washington Start-up Cost Recovery Requested	\$21.2 million	\$1.9 million	(b)
(3)	Proposed Price Per Non-electronic Service Order	\$13.04	N.A.	(c)
(4)	Proposed Price Per Electronic Service Order	\$8.57	N.A.	(c)
(5)	Proposed Price Per Local Service Request	N.A.	\$3.27	(d)
(6)	Approximate Number of Access Lines in WA	2,603,969	918,776	(e)
(7)	Cost Per Access Line in WA (7) = (2) / (6)	\$8.14	\$2.06	

	Notes
(a)	Exh. T-90, p. 3; Exh. T-320, p. 10. The costs reported by Qwest are for the years 1997, 1998, and anticipated 1999 expenditures. The Verizon datum is for the years 1996-1999.
(b)	Qwest -- Exh. T-95, p. 10; Verizon -- Exh. C-252, p. 5-WA3 (non-confidential).
(c)	Exh. 803; <i>Opening Brief of Qwest Corporation</i> at para. 111. Qwest initially requested rates of \$14.19 for non-electronic and \$9.58 for electronic orders. Exh. T-90, p. 5.
(d)	<i>Post Hearing Brief of Verizon</i> at para. 89.
(e)	FCC ARMIS report 43-08, 1999-Washington-Total Switched Access Lines. http://gullfoss.fcc.gov:8080/cgi-bin/websql/prod/ccb/armis1/forms/armis.hts

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Line One of Table 1 suggests that Qwest's estimated national OSS transition costs are more than twice the level reported by Verizon. Lines Two and Six suggest that Qwest's proposed recovery of OSS transition costs per access line in the state of Washington is approximately four-times greater than Verizon's request per access line.

- 147 The Commission is concerned with the difference in rates proposed by Qwest and Verizon. Consider, for example, a CLEC that will serve a customer through the use of an unbundled loop and port where the customer currently is served by an ILEC. For this particular type of order, Verizon proposes to charge \$3.27 for a single local service request to recover OSS transition costs, but Qwest would charge a minimum of \$34.28 (for four service orders), more than ten times as much as Verizon.¹⁵⁴ Furthermore, if multiple service orders were placed for the same location, Verizon would still charge just \$3.27 per LSR. Qwest, on the other hand, would increase its charges proportionately with the number of ordered loops and ports.¹⁵⁵
- 148 The record in this proceeding indicates why such a substantial difference exists in the prices proposed by Qwest and Verizon. Verizon's OSS modifications are managed internally by its own employees and processes.¹⁵⁶ Qwest does not perform its own OSS modifications, but relies on a contractor, Telcordia, a subsidiary of Science Applications International Corporation.
- 149 Telcordia (formerly Bellcore) was owned by U S WEST (prior to its merger with Qwest) and the other regional Bell operating companies ("RBOCs"). U S WEST and the other RBOCs sold Telcordia to its current owners in 1997 along with proprietary rights to many of the software systems that are integral to Qwest's operations support systems. Because Telcordia is the owner of the software, Qwest must rely on this one vendor to modify operations support systems as long as Qwest retains the existing systems.¹⁵⁷ Because Qwest is unable to solicit bids from competing vendors, Qwest is a captive customer of a single vendor. Telcordia's prices are no longer based on the cost of producing the software; rather, Telcordia's prices are based on Telcordia's ability to maximize its own profits. This point was illustrated by Qwest witness Brohl during her cross-examination:

Q: Did Qwest in its dealings with Telcordia for the line sharing upgrade take

¹⁵⁴ Exhs. 124, C-124. Qwest's is a minimum charge because it is based on the assumption that the order is placed electronically.

¹⁵⁵ *Opening Brief of Qwest Corporation* at para. 110.

¹⁵⁶ GTE's information technology organization has been recognized within its industry for its cost-efficiency. Exh. T-260 at pp. 9-11. *See also* Verizon Response to Bench Request No. 9.

¹⁵⁷ TR at 829-835.

any steps to insure that Qwest was not paying for a software upgrade that Telcordia had already been paid to do for another ILEC?

A: We did not, but there is a reason for that. Back when Telcordia was actually Bellcore and it was owned by the seven companies, that was a normal process, a normal way of doing business, because the way that worked back then is that any software modification that then Bellcore did was then divided up, the cost was then divided up amongst how many of the seven RBOCs had requested that change. That's different now. They are not owned by any of us any longer, have not been for at least five years, and so what they deal with now are not cost-base pricing. They deal with market prices. They don't cost-base price to us or to anyone else, as far as I know, and so that's not really an appropriate thing in this environment any longer.¹⁵⁸

150 Qwest's inability to negotiate a cost-based price from Telcordia is also illustrated by its response to a data request from Rhythms to "identify and describe the process U S WEST used to decide that Telcordia's prices on [the HUNE OSS] project were reasonable and the alternatives, including other contractors, that U S WEST considered when making this decision." Qwest responded that it was not feasible to evaluate other contractors because:

The systems owned by Telcordia and used by U S WEST are very large and deeply embedded within U S WEST's business infrastructure. To use 'other contractors' to provide the line sharing software functions would require the 'other contractors' to replace the impacted Telcordia systems or to integrate a separate solution with all the affected Telcordia systems. To purchase a whole new system for a single product rollout would be very expensive and unnecessary if modifications to pre-existing systems would prove feasible and the sufficient. Therefore, to purchase enhancements for pre-existing systems for the purpose of implementing new products is more cost effective than purchasing whole new systems from scratch to support new products.¹⁵⁹

151 On April 14, 1997, U S WEST Communications, Inc., filed an application with the Commission for permission to sell the share of stock held by U S WEST representing

¹⁵⁸ TR at 864-65.

¹⁵⁹ Exh. 118.

its one-seventh ownership of Bellcore.¹⁶⁰ In that proceeding, U S WEST represented that Bellcore's Board of Directors had determined that Bellcore could more effectively provide support services if it operated independently of its RBOC owners.

152 On August 27, 1997, the Commission entered an Order Granting Application authorizing U S WEST to sell its ownership interest in Bellcore, and stated:

This order shall in no way affect the authority of this Commission over rates, service, accounts, valuations, estimates or determination of costs, or any matters whatsoever that may come before it, nor shall anything herein be construed as an acquiescence in any estimate or determination of costs, or any valuation of property claimed or asserted.

153 The sale of Bellcore compensated U S WEST and the other RBOCs for whatever exclusivity is associated with the ongoing proprietary ownership of those pre-existing assets, including software essential to Qwest's operations support systems.¹⁶¹ The likelihood that modifications to software essential to U S WEST's OSS would be necessary was foreseeable at the time of the sale transaction. U S WEST set its sale price in consideration of its future reliance on an outside contractor. Regulatory approval of the sale does not preclude the Commission from later considering whether rates designed to recover costs to modify software systems are proper based on applicable standards and all relevant factors. In light of the disparity between Qwest's captive-customer and Verizon's cost-based transition costs, it is clearly apparent that Bellcore's independent operation does not result in a more cost-effective provision of support services from the perspective of Qwest's CLEC customers.

154 We find that Qwest's OSS costs are clearly not cost-based and that they are not just and reasonable. While the ILECs should be compensated for the reasonable costs that they incur to modify their OSS for use by the CLECs, the CLECs should not be

¹⁶⁰ *In the Matter of the Sale of U S WEST Communications, Inc.'s Interest in Bellcore Communications Research, Inc.*, Application for Transfer of Property, Docket No. UT-970648 (1997).

¹⁶¹ U S WEST's treatment of the revenue from the sale of Bellcore is not relevant to the determination of reasonable UNE rates because Section 252(d) of the Act requires that the UNE rates be set independently of retail rates.

required to pay unreasonable rates. Both Qwest and Verizon are required by the Act to offer CLECs access to their operations support systems; however, Qwest is locked into a single supplier because it sold the rights to the software that runs its operations support systems. This exclusive contractual arrangement is an important factor in explaining the large price differences proposed by the ILECs. The prices proposed by Qwest are not just and reasonable, especially when compared to Verizon's costs and pricing.

155 The record demonstrates that the difference in proposed rates is due in large part to Qwest's reliance on Telcordia to perform modifications to its software systems and Qwest's inability to effectively negotiate its costs. However, regardless of the reasons for the difference in proposed prices between Qwest and Verizon, Qwest's proposal clearly fails the just and reasonable standard of Section 252(d)(1) of the Act. Qwest's proposed rates are as much as ten times higher than Verizon's -- the only cost-based measure of record -- for the same functionality, and we conclude that Qwest's proposed rates do not conform with the Act's pricing standard.

156 The Commission finds that Verizon's proposed rates are just and reasonable, and we approve these charges to be applied on a local service request basis. Verizon's non-recurring charge for OSS transition cost recovery is \$3.27 per local service request and its non-recurring charge for OSS transaction cost recovery is \$3.76 per local service request.¹⁶² These rates and rate structure comprise the best evidence on the record about the actual costs of performing these functions.

157 Qwest's proposal to assess charges on a service order basis is rejected because it does not produce predictable rates. Verizon's approved transaction fee is associated with the same OSS as its transition charge. In light of our rejection of the costs reported by Qwest, we find that Qwest must charge both OSS transition and transaction rates equal to Verizon's approved rates.

158 As is the case with Verizon, these charges must be applied on a local service request rather than a service order basis. Verizon developed the transaction charge to cover its ongoing data processing and system maintenance costs based on its forecasted volume of LSRs.¹⁶³ Verizon claims that the transaction charge is a conservative

¹⁶² *Post Hearing Brief of Verizon* at Attachment A, page 1. *See also* Exh. T-320 at 11.

¹⁶³ Exh. T-320 at p. 11.

surrogate for its annual costs going forward; however, actual costs may change over time. Accordingly, parties may challenge the transaction cost recovery rate in future proceedings.

159 In Docket UT-960369 the Commission found GTE's common cost study to be unsatisfactory. Rather than denying GTE the opportunity to recover its common cost, the Commission substituted U S WEST's mark-up and applied it to GTE's direct costs.¹⁶⁴ Here, to avoid denying Qwest the opportunity to recover the reasonable costs of its services we use the only other evidence of record – that of Verizon – to determine the costs.

160 Having determined that Qwest's OSS rate will be identical to the charges approved for Verizon, we next consider the amount of money that Verizon and Qwest will be permitted to collect through the transition charge. We determine that Verizon's Washington OSS transition collection may not exceed \$1.9 million and that Qwest's Washington OSS transition collection may not exceed \$5.5 million.¹⁶⁵ The value assigned to Qwest's OSS recovery is derived by multiplying Verizon's proposed collection in the state of Washington (\$1,900,000) by the approximate ratio of access lines of Qwest to Verizon (2.6/.9) for the state of Washington.

¹⁶⁴ 17th Supplemental Order at para. 203.

¹⁶⁵ The transition charge recovers the cost of converting OSS so that the ILECs' back-office operations are accessible to the CLECs. The transition charge will remain in place until full recovery is accomplished; however, the period of recovery depends on the volume of LSRs over time. Parties may challenge whether transition cost recovery has been accomplished in future proceedings.

ii. Cost Recovery Mechanism**(1) Retail Rates**

- 161 Commission Staff provides a thoughtful analysis of the degree to which OSS transition costs have already been recovered through retail rates. As Staff points out, the OSS transition costs were included in the costs considered during the recent Verizon rate review and were taken into account in the determination of the going-forward retail rates. Because these costs were effectively taken into account in setting Verizon's retail rates, some form of rate reduction merits consideration. These costs were not taken into account when the Qwest retail rates levels were most recently reviewed.¹⁶⁶ Staff also alleges that Qwest's current rate of return exceeds the authorized return and therefore the new revenue should be used to reduce other rates.
- 162 The Commission will not require that OSS transition recovery revenue be used to reduce other wholesale or retail rates at this time. Section 251(d)(1) of the Act states that UNE rates be set without reference to a rate of return or other rate-based proceeding. We do not believe that selected wholesale rates should be reduced because of a company's overall earnings. The Commission establishes UNE rates based on the cost of providing specific elements; a rebate would result in a price that is below the cost of service. The Act is clear in its discussion that UNE rates should be based on the economic cost of service, and therefore a company's overall rate of return on embedded investments should not be taken into account when setting the prices of unbundled network elements.¹⁶⁷
- 163 In the Qwest merger case, the Commission approved an agreement that prevents the lowering of retail rates when a new wholesale charge is implemented, but does permit revenue-neutral rate rebalancing. The introduction of a new wholesale rate falls outside the scope of the terms of the Qwest merger agreement. Furthermore, as in our resolution of the HUNE recurring rate, we find that new revenues from wholesale

¹⁶⁶ Staff does not contend that Qwest's costs considered in Docket No. UT-970766 include OSS transition costs. Exh. 350 at 9.

¹⁶⁷ The Commission notes that Verizon's statement that "§ 251(d)(1)'s requirement that UNE rates be set without reference to a rate of return or other rate-based proceeding" is a reversal of the position it took in Docket No. UT-960369 but consistent with this Commission's findings. Cf. *Reply Post Hearing Brief of Verizon* at para. 53 and the 17th Supplemental Order at para. 124-25 and 196-202.

UNEs should not be treated in isolation from other relevant developments. This proceeding is not the appropriate forum to determine whether Qwest or Verizon are earning in excess of their authorized rates of return.

iii. Sufficiency and Accuracy of OSS Cost Estimates

(1) Audit

164 Staff and the Joint CLECs urge the Commission to order an audit of the ILECs' reported OSS expenditures. According to these parties, the record is not sufficiently rich to support a finding that the ILECs' claimed expenses are associated with providing access to their operations support systems.

165 We find that it is unnecessary at this time to undertake an independent audit of the costs incurred by Qwest and Verizon to modify their OSS for use by CLECs because the costs of such an audit to telecommunications users in Washington would outweigh the benefits of completing this task. The OSS transition costs reported by Verizon and Qwest are associated with operations in multiple states, not just Washington. Therefore, it would be inappropriate for the state of Washington alone to shoulder the expense of such an audit, nor is there a simple way to organize a national audit, particularly with respect to Verizon.¹⁶⁸

166 The Commission finds that the benefits of an audit do not merit the expense. However, the reasonableness of these expenses may be considered in the scope of future rate cases.

(2) Appropriate Cost Recovery Mechanism

167 The Joint CLECs argue in favor of recovering OSS modification costs from all end users in Qwest's and Verizon's service territories in Washington. As support for this argument the Joint CLECs point towards Congress' treatment of interim number portability transition costs.

168 In response, we point out that Section 251(e)(2) of the Act gives state commissions

¹⁶⁸ With regards to Qwest, the Regional Oversight Committee of the fourteen Qwest states would be a natural organization to undertake such an investigation. We do not know if other states would be interested in such an undertaking and, based on the record in this proceeding, we are skeptical whether benefits from an audit, in terms of establishing UNE rates, would merit the cost.

explicit direction on how number portability transition costs should be recovered. No such explicit recognition is given to the treatment of OSS costs. We believe that if Congress had intended OSS costs to be treated in a fashion analogous to number portability, Congress would have included comparable statutory direction and would not have allowed OSS rates to be included in the same pricing category as other unbundled network elements. Further support for this view is found in the FCC's Line Sharing Order, which states:

We find that incumbent LECs should recover in their line sharing charges those reasonable incremental costs of OSS modification that are caused by the obligation to provide line sharing as an unbundled network element. We believe that this guideline is consistent with the principle set forth in the Local Competition Order that incumbent LECs cannot recover nonrecurring costs twice. We also reaffirm the conclusions in the Local Competition Order, that the states may require incumbent LECs in an arbitrated agreement to recover such nonrecurring costs such as these incremental OSS modification costs through recurring charges over a reasonable period of time; and that nonrecurring charges must be imposed in an equitable manner among entrants.¹⁶⁹

169 Consequently, we determine that the CLECs are required to pay for reasonable OSS transition costs incurred by Qwest and Verizon in modifying their OSS for use by CLECs. This issue had been addressed previously by this Commission,¹⁷⁰ and no party to this proceeding has presented any new arguments that we find sufficiently compelling to cause us to reverse our previous positions.

(3) Allocation Issues and Line Sharing

170 In their discussion of allocation and line sharing the DLECs have neither provided their own demand forecasts nor any testimony in the record to support the contention that Qwest's forecasts for MegaBit services is the correct proxy for forecasting xDSL usage in the future.¹⁷¹

¹⁶⁹ Line Sharing Order at para. 144.

¹⁷⁰ See 17th Supplemental Order at para. 98-106.

¹⁷¹ Covad and Rhythms *Part A Post Hearing Brief* at para. 95.

171 We find that Qwest and Verizon may recover from CLECs any reasonable OSS costs incurred to provide Line Sharing. We refer to the FCC's Line Sharing Order, quoted above, in support of this decision.

172 Qwest contends that as long as it is not offering xDSL service through a separate subsidiary it should not be obligated to make a contribution to the OSS costs incurred to provide line sharing.¹⁷² We agree with Qwest on this point. Contributions to OSS Line Sharing charges will only be required when a separate subsidiary is providing xDSL service, as is the case with Verizon. If Qwest does create a separate subsidiary to provide xDSL services, that subsidiary will be responsible to make a contribution toward the recovery of OSS costs. In this event, under the OSS cost recovery proposal outlined in this order, the total amount of OSS recovery costs would not change.

173 In this proceeding Verizon does not propose a separate OSS charge with respect to OSS modification costs incurred to provide line sharing. Qwest, on the other hand, proposes a separate charge of \$3.77 for the high frequency portion of the loop.

174 We find that Qwest's proposal to initiate a separate HUNE OSS charge is unreasonable and anti-competitive. The Commission believes that allowing Qwest to initiate a separate charge of this magnitude on top of the HUNE rate established earlier in this order would be contrary to section 706 of the Act, which requires that state commissions encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans. Therefore, for the purpose of OSS cost recovery, the high frequency portion of the loop will be treated in the same manner as all other unbundled elements requested by CLECs.¹⁷³

¹⁷² *Opening Brief of Qwest Corporation* at para. 117-118.

¹⁷³ The OSS transition charge of \$3.27 per LSR established in this order applies to the high frequency portion of the loop as well as all other unbundled elements.

(4) Other Issues

175 As discussed in paragraphs 146-56 above, we determine that Qwest's OSS cost recovery proposal fails to meet the just and reasonable standard of Section 252(d)(1) of the Act, and that Qwest must charge OSS transaction and transition charges equal to the rates proposed by Verizon. In light of this decision the Commission has decided not to rule on the following matters at this time:

1. The inclusion of business fees, product management costs, administrative costs, and attributed costs in Qwest's OSS cost recovery proposal;
2. The accuracy of Qwest's unbundled element demand forecast;
3. The appropriate service life of line sharing used in Qwest's cost study; and
4. The accuracy and sufficiency of documentation provided by Qwest in support of the costs incurred to modify their OSS for line sharing.

176 The Joint CLECs argue that in the event the Commission allows the ILECs to impose 100% of their non-TELRIC OSS costs upon the CLECs, the Commission should allow the CLECs to recover from Qwest and Verizon the costs they have incurred in modifying their OSS, to the extent that these modifications mirror those made by the ILECs.¹⁷⁴

177 We note that there is a substantial difference between the ILECs and the CLECs with respect to OSS transition costs. While Qwest and Verizon have incurred costs to modify their OSS in order to comply with a Congressional mandate, no similar mandate appears in any statute that applies to the CLECs. It follows then that it is appropriate to treat the ILECs and CLECs differently in order to reflect the difference in statutory requirements. The Commission denies the CLECs request to recover their OSS modification costs from Qwest.

178 The CLECs assert that Qwest and Verizon have required the CLECs to bear the responsibility for ordering sufficient interconnection facilities to carry traffic exchanged between their respective networks. They add that because in many cases more than 50% of the traffic carried on these facilities originates on the ILECs network, the ILECs receive an equal or greater benefit from this arrangement than the

¹⁷⁴ Joint CLEC *Part A Post-Hearing Brief* at para. 50.

CLECs. The Joint CLECs urge the Commission to disallow Qwest's proposal to recover costs incurred to develop OSS processes associated with the ordering and provisioning of interconnection facilities. The Joint CLECs point out that Verizon effectively agrees and does not propose to recover similar OSS costs.¹⁷⁵

179 We find that it is inappropriate to allow Qwest to charge the CLECs when the CLECs cannot in turn charge the ILECs for ordering and provisioning interconnection facilities. Qwest's proposal to recover these costs is inconsistent with Sections 251(b)(5) and 252(d)(2)(A) of the Act, which require reciprocal compensation for the termination of calls. However, our resolution of this issue does not indicate how we may choose to rule on the issue of reciprocal compensation in Part B of this proceeding.

180 Finally, Verizon's proposal to charge \$4.92 per LSR for the recovery of the NOMC shared costs is approved.

3. Collocation

a. Background

181 Collocation allows a CLEC to place both equipment and cables into an ILEC's central office, and to terminate those cables on transmission equipment owned by the CLEC. The CLEC installs and maintains its own equipment in the collocation space provided by the ILEC. The CLEC's transmission equipment can then be interconnected to the ILEC's network. Collocation also facilitates CLEC access to unbundled network elements.¹⁷⁶

182 In this docket the Commission has been asked to establish costs for, and settle issues related to, collocation for line sharing and collocation for UNEs. In this section of the Order the Commission discusses these issues and establishes the appropriate costs related to collocation for line sharing and collocation for UNEs.

¹⁷⁵ Joint CLEC *Part A Post-Hearing Brief* at para. 54.

¹⁷⁶ *Opening Brief of Qwest Corporation* at para. 120.

b. Collocation Costs for Line Sharing¹⁷⁷

183 Line sharing occurs when xDSL and ILEC voice services are both provided across the same loop. For the purposes of this case, line sharing requires access to the HUNE on an all-copper loop. According to current FCC rules, the loop must already be carrying ILEC voice services before a CLEC can order the HUNE. To access the loop, a CLEC must have access to a POTS¹⁷⁸ splitter in the central office from which the loop extends.¹⁷⁹ That POTS splitter can either be CLEC-owned and collocated (as is the case with Qwest) or ILEC-owned and leased to the CLECs (as is the case with some Verizon configurations). The loop is then connected to the POTS splitter via either tie cables or jumpers, where the voice and data signals are again directed to their appropriate destinations via either tie cables or jumpers.¹⁸⁰

184 Regarding Collocation for Line Sharing, the Commission must determine: (1) the recurring and non-recurring prices for installing and maintaining the additional equipment needed to support line sharing; and (2) the non-recurring prices for installing and disconnecting a shared line.

185 The basic differences between Covad/Rhythms'¹⁸¹ and Qwest's collocation pricing proposals are as follows: the length of cable necessary for installation of the splitter based on the appropriate location of the POTS splitter in the control office; the appropriate engineering time assumptions (both quantity and allocation) for splitter

¹⁷⁷ This particular issue has been briefed only by Covad and Rhythms, Verizon, and Qwest. The issue of line splitting over UNE-P has been briefed by the Joint CLECs, Verizon, and Qwest.

¹⁷⁸ The acronym "POTS" stands for "plain old telephone system" and is commonly used as a generic reference to the legacy telephone network.

¹⁷⁹ A splitter's primary function is to separate the high frequency, xDSL signals, from low frequency (voiceband) analog signals traversing the copper loop. In some circumstances, the Digital Subscriber Line Access Multiplexer (DSLAM) and a splitter are combined in the same piece of equipment. The DSLAM sends the customer's voice traffic to the public, circuit-switched telephone network and the customer's data traffic (combined with that of other xDSL users) to a packet-switched data network. Once on the packet-switched network, the data traffic is routed to the location selected by the customer, for example, a corporate local area network or an Internet service provider. That location may itself be a gateway to a new packet-switched network or set of networks, like the Internet.

¹⁸⁰ *Part A Post Hearing Brief of Covad and Rhythms* at para. 30.

¹⁸¹ Covad and Rhythms jointly filed post-hearing briefs. For convenience, they are jointly referred to as "the DLECs" in the collocation section of this Order.

collocation; and whether Qwest is entitled to recover costs of using an intermediate distribution frame ("IDF") between the main distribution frame ("MDF") and the splitter.¹⁸²

186 The basic differences between the DLECs and Verizon are as follows: the length of cable necessary for installation of the splitter; Verizon's withdrawal of its Verizon-owned splitter option; and the use of certain methodologies to derive collocation costs in Verizon's line sharing study.

i. Policy Issues

187 The policy issues presented are: (1) whether Verizon should be permitted to withdraw its Verizon-owned splitter option; (2) line splitting over UNE-P concerns; and (3) what type of central office should be modeled when developing collocation costs for line sharing.

(1) Verizon-Owned Splitter Option

188 The DLECs request that Verizon be required to continue to offer the Verizon-owned splitter option, which is one of three collocation configuration options that Verizon currently offers to CLECs.¹⁸³ Verizon states that this configuration will be available to CLECs until December 15, 2000, after which date "any CLEC currently using a Verizon-owned splitter will continue to receive line sharing under this configuration, but any new line sharing orders must use one of the CLEC-owned splitter configurations."¹⁸⁴

189 The DLECs contend that Verizon seeks to increase CLEC costs by withdrawing its agreement to provide ILEC-owned splitter functionality to CLECs seeking to line share¹⁸⁵ and that the Commission should not allow Verizon to withdraw this option after CLECs have deployed their networks in reliance on that option because the

¹⁸² *Id.* at para. 31

¹⁸³ *Id.* at para. 28, 58.

¹⁸⁴ *Post Hearing Brief of Verizon* at para. 51.

¹⁸⁵ Part A Post Hearing Brief of Covad and Rhythms at, para. 58.

result is inefficient and unfair to the CLECs.¹⁸⁶

190 Verizon responds that requiring the Company to continue offering its company-owned splitter configuration is tantamount to creating a new unbundled network element in the form of a splitter and that a number of legal principles and precedents preclude the Commission from ordering Verizon to purchase splitters for CLEC benefit.¹⁸⁷ Verizon cites extensively from rulings by the 8th Circuit Court in Iowa Utilities Board in support of its contention that "[t]he obligation to unbundle existing network elements under the Act does not mean that CLECs are entitled to demand that incumbents purchase equipment for CLEC use, and then 'unbundle' that equipment to further CLEC business plans."¹⁸⁸

191 Verizon asserts that it does not have stand-alone splitters in its network beyond those it has purchased and installed for CLECs to use. Thus, Verizon argues, any obligation that it provide CLECs with Verizon-owned splitters would require the Company to purchase new splitters, a requirement that is inconsistent with the Eighth Circuit's conclusion that an incumbent LEC is only required to provide access to its existing network -- "not to a yet unbuilt superior one."¹⁸⁹

192 Verizon further states that while it did purchase a limited amount of splitters for CLECs to facilitate line sharing, it did so only as a temporary measure in order to meet the FCC's June 6, 2000, deadline and that the CLECs were informed of the temporary nature of this offering from the moment that Verizon issued its line sharing proposal on May 24, 2000.¹⁹⁰

193 Verizon also asserts that any requirement that the Company purchase splitters for CLEC benefit would be inconsistent with the FCC's rules.¹⁹¹ Verizon argues that its

¹⁸⁶ *Part A Post Hearing Reply Brief of Covad and Rhythms* at para. 37.

¹⁸⁷ *Reply Post Hearing Brief of Verizon* at para. 10.

¹⁸⁸ *Ibid.*

¹⁸⁹ *Id.* at para. 11.

¹⁹⁰ *Ibid.*

¹⁹¹ Verizon does note, however, that the FCC states: "In response to petitions for reconsideration of the UNE Remand Order, we have been asked to consider whether to impose on incumbent LECs a

position is supported by the FCC's Line Sharing Order, the SBC 271 Texas Order, and the UNE Remand Order. For example, the Line Sharing Order states: "We conclude that, subject to certain obligations, incumbent LECs may maintain control over the loop and splitter equipment and functions." *At para. 78.*

194 In the SBC 271 Texas Order, the FCC states: "The UNE Remand Order cannot fairly be read to impose on incumbent LECs an obligation to provide access to their splitters. Indeed, the only discussion of the splitter appeared in a discussion of a network element (the packet switching element) that we decided not to unbundle . . ." *At para. 327.* Verizon argues that the FCC's findings mean that while ILECs may choose to own and provide splitters to CLECs, they are not obligated to do so.

195 Finally Verizon asserts that public policy concerns such as promoting rapid introduction of competition or promoting facilities based competition actually favor CLEC vs. ILEC ownership of splitters.¹⁹² In support of this position Verizon notes that: 1) the record is void of any evidence as to how much more rapidly xDSL services would be made available in Washington if Verizon were required to continue to supply splitters beyond December 15, 2000; 2) the Joint DLECs' proposal that Verizon continue to own splitters would hinder facilities-based competition and technological innovation by putting Verizon in charge of selecting the types of splitters and the time tables for their implementation; and 3) ILEC ownership is administratively inefficient and cumbersome in view of (i) the greatly expanded central office wiring required to implement ILEC ownership of splitters, (ii) the absence of any reliable forecasts of aggregate or individual CLEC line-sharing/splitter demand, and (iii) the variety of types of splitters that incumbents could be required to maintain in inventory.¹⁹³

new obligation to provide access to the splitter AT&T's arguments merit prompt and thorough consideration . . . and we commit to resolving them expeditiously in our reconsideration of the UNE Remand Order." *In the Matter of Application by SBC Communications Inc., Southwestern Bell Telephone Company, and Southwestern Bell Communications Services, Inc. d/b/a Southwestern Bell Long Distance Pursuant to Section 271 of the Telecommunications Act of 1996 to Provide In-Region, InterLATA Services in Texas*, CC Docket No. 00-65, Memorandum Opinion and Order, (June 30, 2000) ("SBC 271 Texas Order") at para. 328. Although the FCC has initiated a Further Notice of Proposed Rulemaking, seeking comments on a broad array of related issues, no ruling has been rendered.

¹⁹² *Reply Post Hearing Brief of Verizon* at para. 15.

¹⁹³ *Id.* at para. 16-18.

Discussion and Decision

196 The Commission finds Verizon's arguments on this issue persuasive. Accordingly, Verizon is not required to continue offering its Verizon-owned splitter option on lines not currently provided with Verizon-owned splitters beyond December 15, 2000, in accordance with its initial line sharing proposal of May 24, 2000. In making this ruling we note that Verizon will allow any CLEC currently using a Verizon-owned splitter to continue to receive line sharing under this configuration after the December 15, 2000 date,¹⁹⁴ and we anticipate that Verizon will keep its commitment.

197 The Commission makes no ruling at this time whether ILECs are obligated to provide access to their splitters where these have been placed on ILEC-owned lines, either for the ILEC's own use or for the use of an ILEC-owned DLEC subsidiary. We note, however, that the FCC has stated: "In response to petitions for reconsideration of the UNE Remand Order, we have been asked to consider whether to impose on incumbent LECs a new obligation to provide access to the splitter AT&T's arguments merit prompt and thorough consideration . . . and we commit to resolving them expeditiously in our reconsideration of the UNE Remand Order."¹⁹⁵ Accordingly, the Commission reserves the right to revisit this issue once a decision by the FCC is released.

(2) Line Splitting Over UNE-P

198 Verizon, Qwest, and the Joint CLECs raised legal issues in their respective briefs concerning Line Splitting Over UNE-P.¹⁹⁶ The Commission was quite clear that this issue would be addressed in Part B of the hearings and so is not taken up here.¹⁹⁷ Parties are encouraged to reiterate their arguments during Part B of this proceeding. We also note the FCC's recent Order on Reconsideration of its Line Sharing Order granting AT&T and WorldCom's request for clarification that ILECs must permit

¹⁹⁴ *Post Hearing Brief of Verizon* at para. 51.

¹⁹⁵ SBC 271 Texas Order at para. 328.

¹⁹⁶ See, for example, *Joint CLEC Part A Post-Hearing Brief*, starting at para. 24, *Opening Brief of Qwest Corporation*, starting at para. 92, and *Post Hearing Brief of Verizon*, starting at para. 65.

¹⁹⁷ See the First and Seventh Supplemental Orders in this proceeding.

competing carriers providing voice service using the UNE-platform to self-provision or partner with a data carrier in order to provide voice and data service on the same line. Parties are also encouraged to address the impact of that decision on pending issues through cross-examination and post-hearing briefs in Part B.

(3) *Modeling and Efficient Central Office Configuration*

199 The DLECs argue that they should not have to bear the cost of inefficient engineering decisions and office configurations made by the ILECs regarding the provision of collocation for line sharing.¹⁹⁸ Specifically, the DLECs contend that Qwest should not be entitled to recover costs of using an intermediate distribution frame ("IDF") between the main distribution frame ("MDF") and the splitter."¹⁹⁹ More generally, however, this issue of efficient office design also touches on many of the technical issues concerning the engineering and cable length assumptions that are in dispute between the DLECs and the ILECs. Consequently, discussion of this issue also serves to frame discussion of the technical issues to be resolved.

200 At the heart of this matter is what type of central office should be modeled when developing collocation costs for line sharing (or for UNE access for that matter). The thrust of the DLECs' argument is that certain line sharing collocation costs proposed by the ILECs "are based on an inefficient deployment of an efficient network architecture" and that this inefficient deployment should not be condoned by the Commission.²⁰⁰

¹⁹⁸ *Part A Post Hearing Brief of Covad and Rhythms* at para. 79.

¹⁹⁹ *Part A Post Hearing Brief of Covad and Rhythms* at para. 31.

²⁰⁰ *Part A Post Hearing Reply Brief of Covad and Rhythms* at para. 27.

- 201 Qwest and the DLECs disagree on network design standards for efficient central office configuration, including placement of cable and splitters (and therefore cable lengths). Another point of contention is whether Qwest, or any ILEC, can require that CLEC splitters be placed on an intermediate distribution frame (IDF) instead of the main distribution frame (MDF) absent compelling reasons supporting the necessity of IDF connection. The issues are similar regarding Verizon's line sharing collocation cost analysis.
- 202 The Commission took the position that a cost model should be forward-looking and reflect the actual operations of an ILEC in the 8th Supplemental Order in Docket No. UT-960369. For instance the Commission required that actual loop lengths be reflected in loop cost estimates.
- 203 This position conforms with the recent ruling by the 8th Circuit Court that invalidated many of the pricing rules established by the FCC, among them the requirement that costs "be measured on the use of the most efficient telecommunications technology currently available and the lowest cost network configuration, given the existing location of the incumbent LEC's wire centers."²⁰¹ The court found this standard to be impermissibly hypothetical and not based on the existing networks of the ILECs, nor on the actual needs of the CLECs. According to the Court:
- Congress has made it clear that it is the cost of providing the actual facilities and equipment that will be used by the competitor (and not some state of the art presently available technology ideally configured but neither deployed by the ILEC nor to be used by the competitor) which must be ascertained and determined.²⁰²
- 204 That said, we note that all cost studies are based on assumptions as to what constitutes proper inputs, and therefore all cost studies necessarily have a hypothetical element built into them. For line sharing collocation the ILECs have presented cost studies that employ models which were designed to determine the overall prices for collocation; prices which will be applied to a broad spectrum of central offices whose actual costs will differ for many reasons. To the extent that no

²⁰¹ 47 C.F.R. §51.505(b)(1).

²⁰² *Iowa Utilities Board v. FCC*, 219 F.3d 750 (8th Cir. 2000).

one of these central offices will be perfectly represented by the models that the ILECs have proposed, the models can be considered hypothetical in nature. This being the case, the Commission agrees with Covad and Rhythms that the question then becomes not whether a party's proposed pricing relies on assumptions, but whether those assumptions are appropriate under proper pricing standards and policy considerations.²⁰³

205 This perspective is especially necessary given that Qwest's model is based on limited data not specific to Washington,²⁰⁴ while Verizon's model assumptions are based on an incomplete survey of a limited number of Verizon collocations in Washington and the application of hypothetical pricing guidelines that do not correspond to the equipment actually being used for line sharing.²⁰⁵ While we perceive that the collocation for line sharing models presented in this case are deficient in the amount of data (Washington-specific or otherwise) used in deriving the models' inputs, we also find that considerable effort has been made to develop these issues and that the time has come to move forward and establish permanent prices.

206 In our determination of permanent prices for collocation, we are guided by whether the parties' model assumptions are appropriate under proper pricing standards, whether they serve to advance the Commission's policy considerations, and whether they are permitted under state and federal law.

²⁰³ *Part A Post Hearing Reply Brief of Covad and Rhythms* at para. 19-20.

²⁰⁴ The study consisted of 31 installations in only 13 Minnesota central offices, despite the availability of data from another 40 Minnesota central offices where line sharing had been implemented, as well as from 78 Washington central offices where line sharing was being implemented. TR: 667:17-668:20 (Hubbard).

²⁰⁵ *Part A Post Hearing Brief of Covad and Rhythms* at para. 58. In support of this assertion the DLECs point out that while Verizon's proposed costs for collocation of and access to splitter functionality require certain assumptions be made regarding cable length, Verizon admits that it has performed no studies on cable length. *Id.* at para. 60; *see also* TR 1258 (Bykerk).

ii. Technical Issues**(1) Cable Lengths**

207 Qwest proposes that the Commission base collocation costs on the use of an average cable length of 100 feet from the main distribution frame (MDF) to the location of the splitter.²⁰⁶ Regarding the office configuration involving a splitter located in a common area, the DLECs contend that Qwest's proposal would place the splitter 100 feet from the MDF, which the DLECs assert is inefficient and results in higher cabling requirements than necessary.²⁰⁷ To counter this inefficient result, the DLECs urge the Commission to require Qwest to adopt an assumption that the splitter will be placed within 25 feet of the MDF for this office configuration.

208 Qwest notes that CLECs are permitted to locate the splitter in their own collocation cage. Where CLECs do not choose to do so, Qwest argues that paragraph 7 of the terms and conditions for providing line sharing in Washington²⁰⁸ requires that Qwest "will install and maintain the splitter in one of three locations in the central office: (i) in a relay rack as close to the CLEC DS0 termination points as possible; (ii) where an intermediate frame is used, on that frame; or (iii) where options (i) or (ii) are not available, on the main distribution frame or in some other appropriate location."²⁰⁹

209 Regarding Verizon's proposed cable lengths of 175 feet, the DLECs point out that Verizon admits that it has performed no actual studies on the cable length required for collocation for line sharing.²¹⁰ Verizon responds that "it had no line sharing arrangements in place, and consequently no actual cable lengths to study. To develop costs for a product it had yet to provision, Verizon by necessity had to develop a cost estimate. Therefore, Verizon developed an estimate based on the average of cable lengths available for provisioning line sharing."²¹¹

Discussion and Decisions

²⁰⁶ *Opening Brief of Qwest Corporation* at para. 71.

²⁰⁷ *Part A Post Hearing Brief of Covad and Rhythms* at para. 64-66.

²⁰⁸ *See* Exh. 192.

²⁰⁹ *Opening Brief of Qwest Corporation* at para. 72.

²¹⁰ *Part A Post Hearing Brief of Covad and Rhythms* at para. 60. *See also* TR 1258 (Bykerk).

²¹¹ *Reply Post Hearing Brief of Verizon* at para. 22; *see also* Exh. T-235 at p. 10 (Behrle).

210 The Commission finds Qwest's cable length assumptions to be reasonable. While we recognize that the cable length assumptions used by Qwest are derived from non-Washington data sources, we also note that the data provided by Qwest is the only data on the record derived from actual studies. Furthermore, the DLECs' witness Zulevic testified that of the three Washington Central Offices he visited, two of those offices had splitters placed at a distance of 100 to 150 feet from the MDF, lending support to the reasonableness of the 100-foot average distance assumed by Qwest in its cost model runs.²¹²

211 While the DLECs are correct that locating a splitter within 25 feet of the MDF is more cost effective for the DLECs, it is also true that being within 25 feet of the MDF is prized real estate that any CLEC, DLEC, or interexchange carrier, as well as the ILEC itself, would like to occupy. As Mr. Zulevic admitted, not everyone can be within 25 feet of the MDF.²¹³ Furthermore, in its recent opinion vacating sections of the FCC's Collocation Order, the D.C. Circuit Court stated that:

The FCC offers no good reason to explain why a competitor [CLEC], as opposed to the LEC, should choose where to establish collocation on the LEC's property; . . . It is one thing to say the LECs are forbidden from imposing unreasonable minimum space requirements on competitors; it is quite another thing, however, to say that competitors, over the objection of LEC property owners, are free to pick and choose preferred space on the LEC's premises, subject to only technical feasibility. There is nothing in Section 251(c)(6) that endorses this approach.²¹⁴

212 The Court makes clear that however desirable it might be for the DLECs to have their splitters within 25 feet of the MDF, ILECs cannot be required to provide it. However, the Act and Commission orders make it equally clear that ILECs must provide service in a non-discriminatory fashion and may not impose standards and practices on other carriers that it does not also impose on itself and/or its subsidiaries.

²¹²TR 971:4-11 (Zulevic).

²¹³TR 995:5-6 (Zulevic).

²¹⁴*GTE Services Corp. v. FCC*, United States Court of Appeals for the District of Columbia, No. 99-1176, 205 F.3d at 426 (March 17, 2000).

This principle guides our consideration of proposed cable length assumptions for line-sharing collocation.

213 Verizon admits that it did not know actual cable lengths at the time it performed its study, and rather than use a number without support, it just used every cable that was in the engineering practice, assigned them equal weight and then divided by the total.²¹⁵ Given that the cable sizes mentioned ran from 50 to 300 feet,²¹⁶ we find that this approach is not a reliable representation of what the actual cable lengths required for line sharing collocation might be. If the preponderance of collocation for line sharing requests involves cable usage more towards the lower end of the cable sizes considered, the weighted averaging process would yield a result lower than the 175 feet proposed by Verizon.

214 Furthermore, Verizon witness Behrle testified that he modeled the following three cable lengths available for line sharing:²¹⁷ 1) a 175 foot long loop termination cable, 2) a 125 foot long cable²¹⁸ as the POT's return signal; and 3) a 175 foot cable to carry the ADSL signal.

215 The DLECs' witness Klick credibly testified that the three cable lengths modeled by Mr. Behrle would result in a splitter/MDF/DSLAM central office arrangement that would make no sense and would be highly inefficient, especially when the preferred configuration involves locating a splitter as close to the MDF as possible.²¹⁹ For example, it is our understanding that in an office configuration of this type, the splitter rack is typically located somewhere roughly in line between the location of the DSLAM and the MDF. This type of arrangement entails the use of three cables: a cable carrying the voice and the data signal running from the MDF to the splitter, a cable carrying the voice only signal then running back to the MDF from the splitter,

²¹⁵TR 1305:6-9 (Behrle).

²¹⁶ Exh. 245, Verizon response to Rhythms Data Request No. 8, Page 15 of 18.

²¹⁷ Exh. T-235 at p.10 (Behrle).

²¹⁸ A figure that Mr. Behrle stated during cross should probably be adjusted to 175 feet. TR 1285:1-9 (Behrle).

²¹⁹ For a more detailed discussion of this issue, *see* TR 1075:23-1079:19 (Klick).

and a cable carrying the data only signal running from the splitter to the DSLAM.²²⁰

216 Verizon's assumptions that all three of these cables are of equal length would result in a triangular arrangement whereby a 175-foot cable connects the MDF to the splitter rack, another 175-foot cable, carrying the voice only portion, goes back from the splitter rack to the MDF, while a third 175-foot cable connects the splitter rack to the DSLAM in a CLEC's physical collocation area. The glaring inefficiency of this arrangement is revealed by Mr. Behrle's assumption that a 175-foot cable is required to carry the combined voice and data signal directly from the MDF to a CLEC-owned splitter when that splitter is located in a CLEC's physical collocation area, which would imply that the distance between the MDF and the CLEC's physical collocation space is only 175 feet to begin with.²²¹ Verizon's cable length assumptions would therefore require $175 + 175 = 350$ feet of cable to go from an MDF to the splitter to a CLEC collocation space, even though the straight-line cabling distance from the MDF directly to the Collocation Space is only 175 feet.

217 Given these infirmities, the Commission rejects Verizon's cable length assumptions as unreasonable. Because we have already determined Qwest's cable length assumptions to be reasonable, the Commission adopts Qwest's cable length assumptions for use in Verizon's cost study and directs Verizon to make a compliance filing of its collocation cost study for line sharing using Qwest's assumed average cable length of 100 feet.

218 Another item related to the cable length issue is whether it is appropriate for a CLEC that is already collocated in an ILEC's central office to re-use tie cables, previously used for other purposes, for line sharing.²²² The Commission finds that such re-use makes sense and should be allowed. It appears that Qwest also agrees that re-use is appropriate.²²³ Accordingly, the Commission directs Qwest and Verizon to modify

²²⁰ The Commission's understanding is based on a number of documents filed in this docket. *See, for example*, Exhibits Exhs. 81 and 82, attached to direct testimony of Qwest witness Robert J. Hubbard (T-80), as well his description of network architecture, Exh. T-80 at p. 15; and, the description provided by Covad/Rhythms witness Michael Zulevic in his direct testimony, Exh. T-170 at pp. 8-12, and attached exhibits (Exh. 171).

²²¹ For a more detailed discussion of this issue, *see* TR 1075:23-1079:19 (Klick).

²²² *Part A Post Hearing Brief of Covad and Rhythms* at para. 69.

²²³ TR 688:8-21 (Hubbard).

their respective cost studies to take this possibility into account. The companies are further directed to model their modifications on the methodology employed by Mr. Klick in Exh. C-184. In making these adjustments, the companies are also directed to file an explanation of any variation between the reductions calculated by the companies and those proposed in Exh. C-184.

219 The DLECs raise another cabling issue regarding Verizon's cost study. According to the DLECs, Verizon would increase DLEC expenses by requiring the use of Category 5 cables (a category not required by Qwest), which is not necessary in order to maintain routine quality standards in a central office.²²⁴

220 Verizon responds that because the high frequency side of a circuit is more susceptible to radiated interference, only cables carrying high frequency traffic require the added protection of Category 5 cable.²²⁵ Verizon further states that it uses Category 5 cabling to provision its own xDSL services.²²⁶

221 Because Verizon seeks to impose the same requirement on collocating CLECs that it imposes on itself in a non-discriminatory manner, it is reasonable that Verizon be allowed to require CLECs to use Category 5 cable to provide xDSL services when collocating in its central offices.

(2) Engineering Costs

222 Qwest proposes that the Commission assume that twenty hours of planning and engineering time goes into a splitter collocation job.²²⁷ This planning and engineering time is derived from Qwest's experience in performing splitter collocation jobs at the 13 Minnesota Central Offices that provided the base for Qwest's collocation for line sharing cost study, as mentioned at footnote 163 above.

223 The DLECs, on the other hand, propose planning and engineering times that vary

²²⁴ *Part A Post Hearing Brief of Covad and Rhythms* at para. 61.

²²⁵ *Reply Post Hearing Brief of Verizon* at para. 24.

²²⁶ *Ibid.* See also, TR 1270:10-16 (Bykerk).

²²⁷ *Opening Brief of Qwest Corporation* at para. 77.

according to the different types of splitter collocation available.²²⁸ As can be seen from the following table, these times differ significantly from the twenty hours proposed by Qwest:

TABLE 2: Splitter Collocation Planning and Engineering Times

Function	MDF Splitter	Common Area Splitter Collocation		Splitter in CLEC Collocation Space
	Collocation	Splitter	Relay Rack	
Outside Plant Access Design	0	0	0	0
MDF Planning	2	1	0	1
Overhead Rack Planning	0.5	0.5	0	0.5
Power Engineer	0	0	0	0
Equipment Engineer	3	1	3	0
Equip. Installation Project Manager	2	1	1	1
Operations Group	1.5	1	1	1
ILEC Contact Group	1	1	0	1
Other ILEC Groups	1	1	0	1
Total Planning and Engineering Time	11	6.5	5	5.5

224 The DLECs assert that Qwest's planning and engineering time study is unreasonable because, among other deficiencies, the company's study does not provide adjusted engineering and planning times for the different types of splitter collocation available nor does it allocate the cost of engineering the rack (as opposed to installing the splitter) across all the equipment that will be placed in the rack or bay.²²⁹

225 In response, Qwest reiterates that its time estimates are based on its actual experience, while those proposed by the DLECs are "recommendations based on hypothetical

²²⁸ *Part A Post Hearing Brief of Covad and Rhythms* at para. 70. The different options available are: MDF Splitter Collocation, Common Area Splitter Collocation, and Splitter in CLEC Collocation Space.

²²⁹ *Part A Post Hearing Brief of Covad and Rhythms* at para. 72.

systems and based on processes that are simply not in place.”²³⁰

Discussion and Decision

- 226 The Commission is not persuaded that Qwest’s planning and engineering time estimates represent a reasonable standard of efficiency. For example, we note that the planning and engineering time estimates developed by the DLECs to provision a full shelf of bay-mounted splitters are within a quarter of an hour of those developed by Verizon.²³¹ Verizon’s estimates are validated by two work orders for the provisioning of line sharing splitters.²³² The similarity between estimates produced by Verizon and the DLECs undermines Qwest’s claim that the DLECs recommendations are “based on hypothetical systems and based on processes that are simply not in place.”²³³
- 227 Furthermore, the validity of Qwest’s twenty-hour assumption is further undercut by an examination of the record which shows, for example, that Qwest’s time assumption includes the engineering of an entire bay, even though an installation of a second splitter into that bay would not require re-engineering of the entire bay every time a splitter is installed.²³⁴ In addition, Qwest’s model is unreliable because it fails to recognize that Qwest does not incur bay engineering costs where the CLEC places a splitter in its own collocation area.²³⁵
- 228 Consequently, the Commission rejects Qwest’s twenty-hour assumption for planning and engineering time and in its place, as explained below, we adopt a value of fifteen hours as the assumption to be used for planning and engineering time. Although Verizon’s estimates lead to the conclusion that Qwest’s assumption for planning and

²³⁰ *Opening Brief of Qwest Corporation* at para. 77-78.

²³¹ *Rebuttal Testimony of David L. Behrle*, Exhibit No. T-235, Table 1 at p. 5. *See also* TR 1050:1-10 (Klick).

²³² *Post Hearing Brief of Verizon* at para. 55. *See also* Exhibit C-234.

²³³ *Opening Brief of Qwest Corporation* at para. 77-78.

²³⁴ TR 713:19-714:7 (Hubbard).

²³⁵ *Id.*, 714:8-17.

engineering time is not reasonable, Verizon's estimates are not necessarily a fair substitute for Qwest.

- 229 We note that a number of Qwest central offices utilize IDFs²³⁶, which Verizon typically does not.²³⁷ Also, Qwest has more multi-floor central offices than Verizon.²³⁸ These differences require slightly more planning and engineering time involving splitter collocation than is currently assumed by Verizon for this activity. Fifteen hours maximum is a just and reasonable adjusted estimate for Qwest. We direct Qwest to make a compliance filing using the planning and engineering time assumption of fifteen hours maximum in its cost study for line sharing collocation.
- 230 The Commission also finds merit in the DLECs' assertions that separate planning and engineering estimates ought to be established for the different types of splitter collocation arrangements available to the CLECs. The evidence presented on this issue appears to indicate that planning and engineering time estimates would vary among splitter collocation options. For example, as noted above, when a splitter is collocated in a CLEC's own collocation area, no bay engineering time is required, whereas collocating a splitter outside of a CLEC collocation area would likely require bay engineering time. As can be seen from an examination of the planning and engineering times presented by the DLECs, and highlighted in Table 2 at Paragraph 223 above, these times may vary from 11.5 hours²³⁹ to provision a full shelf of bay mounted splitters collocated in a common area, to 5.5 hours for a splitter placed in a CLEC's collocation space.
- 231 Therefore, the Commission further directs Qwest's compliance filing to utilize separate planning and engineering time estimates for the different splitter collocation configuration options they are making available. The planning and engineering time estimate for collocating a splitter in a bay located in a common area, which involves the most time, must not exceed the maximum of fifteen hours.

²³⁶ TR 721:17-722:1 (Hubbard).

²³⁷ TR 1226:10-14 (Boshier).

²³⁸ TR 994:5-12 (Zulevic).

²³⁹ Verizon assumes 11.25 hours; *See* Exhibit No. T-235, Table 1 at p. 5 (Behrle).

232 We note that Qwest Witness Thompson testified that Qwest had filed new proposed rates that corresponded to the configurations that have been requested by the DLECs.²⁴⁰ Mr. Thompson testified that these new optional configurations are found in Exh. 22. In making its compliance filing, Qwest is directed to ensure that it conforms to the configurations found in Exh. 22.

(3) *Qwest Shelf Allocations (Fill Rate)*

233 The DLECs assert that for pricing purposes, it is more appropriate to assume 12 splitters per relay and cable rack rather than the 8 assumed by Qwest.²⁴¹ In response Qwest asserts that its assumptions of 8 splitters per rack is reasonable based on the small number of line sharing requests it has received to date and on the low fill-rate it has experienced for the provisioning of line sharing. Qwest further states that in its actual experience with line sharing to date, only three splitters are being used in each rack.

234 The DLECs argue that "[t]his proposal is based substantially on a prediction that there will be so few lines shared that splitter bays will be left underutilized. The suggestion that current line sharing deployment (just months after it was even possible) should be the basis for cost study inputs is unsupported . . ." ²⁴²

Discussion and Decision

235 The Commission does not find in the record any kind of demand projections for line sharing presented by the DLECs.²⁴³ The only evidence of record before the

²⁴⁰ Exh. T-235 at p.17.

²⁴¹ *Part A Post Hearing Brief of Covad and Rhythms* at para. 77.

²⁴² *Part A Post Hearing Reply Brief of Covad and Rhythms* at para. 29.

²⁴³ This was noted at *Opening Brief of Qwest Corporation* at para. 81-82. Furthermore, in Exhibit 8, Request No. COVAD 10, Qwest asked Covad to "provide all documents that relate to, discuss or

Commission is Qwest's report that generally only three shelves per rack are being used in each its relay racks.²⁴⁴ This asserted low rate of rack usage is further supported by Verizon's claim that the work orders it has received to date have been for partially equipped splitter bays.²⁴⁵ The Commission finds that Qwest's shelf allocations are reasonable.

(4) Verizon's Use of Digital Circuit Equipment in its Model

236

The DLECs allege that Verizon has "inappropriately increased the recurring cost of splitter access and collocation by developing those costs based on a model associated with digital circuit equipment."²⁴⁶ The DLECs also assert that Verizon admits that POTS splitters are non-powered equipment with no complicated electronics and require less maintenance and engineering than the other equipment traditionally placed in the digital circuit equipment line item.²⁴⁷ Consequently, the DLECs request that the Commission "reject Verizon's proposed splitter access and collocation costs

otherwise concern the time period that you forecast, project, plan, or otherwise hope to use line sharing arrangements with U S WEST in Washington." Covad responded to this, in part, by stating that "to the extent this request calls for Covad's forecasts of line sharing volume within the next year, Covad already has provided that information to U S WEST in accord with the Interim Line Sharing Agreement. Those documents are highly confidential, proprietary and contain trade secret information." If the DLECs felt that Qwest had not taken their forecasts of line sharing volume into account in the development of Qwest's shelf allocation figures, they could have presented the Commission with their own forecasts of line sharing volume to rebut Qwest's demand assumptions for shelf allocation. That the DLECs chose not to provide this information for our consideration leaves the Commission with no choice but to rely on the assumptions used by Qwest.

²⁴⁴ *Reply Brief of Qwest* at para. 18, *see also* TR 457:14-458:10 (Thompson).

²⁴⁵ Exh. T-235 at p. 7. *See also* TR 1237:18-25 (Boshier).

²⁴⁶ *Part A Post Hearing Brief of Covad and Rhythms* at para. 62.

²⁴⁷ *Ibid.*, *See also* TR 1275-76.

and require Verizon to file a new cost study that does consider the significantly lower expenses associated with splitters."²⁴⁸

237 Verizon responds that "at the time Verizon performed its cost study, it did not have any actual work orders for line sharing to establish the cost of minor materials for the interim Verizon-owned splitter arrangement."²⁴⁹ Consequently, the Company followed its standard operating procedure of applying a minor material loading factor using all circuit equipment as a surrogate for this interim configuration."²⁵⁰ Verizon refers to the configuration as interim because these loading factors are meant to apply only to the Verizon-owned splitter option, which Verizon seeks to discontinue.

Discussion and Decision

238 Because the Commission agrees that Verizon is not required to offer its Verizon-owned splitter option on lines not currently provided with Verizon-owned splitters beyond the December 15, 2000, the determination of loading factors for that collocation option appears to be a moot point. However, Verizon has another collocation option, its Virtual Collocation Option, wherein Verizon installs, operates, and manages the splitter on a CLEC's behalf. Verizon witness Behrle testified that maintenance and support factors for the splitter shelf and cards, and the tie cables from the splitter shelf to the MDF, are calculated on the basis that the splitter is a piece of digital circuit equipment, even though a splitter is just a filter which has no electronics or power.²⁵¹

239 We find that these factors are inappropriate when applied to splitters, and we direct Verizon to make a compliance filing establishing that these factors, or any other factors derived from a consideration of digital circuit equipment, are not being applied to Verizon's Virtual Collocation Option or any of Verizon's other options for line sharing collocation.

²⁴⁸ *Ibid.*

²⁴⁹ TR 1276 (Behrle).

²⁵⁰ *Reply Post Hearing Brief of Verizon* at para. 32.

²⁵¹ TR 1275:14-23 (Behrle).

(5) Jumper Costs

240 The DLECs contend that the Commission should reject Verizon's attempt to compel CLECs to pay for jumper costs that Verizon would incur regardless of line sharing.²⁵² Verizon concedes that it would have to pay maintenance costs for the jumper wire carrying voice service regardless of line splitting, and agrees to make the appropriate revisions to its cost study to reflect the costs of only 2 jumpers on the MDF incremental to line sharing.²⁵³

Discussion and Decision

241 The Commission acknowledges Verizon's agreement with the DLECs on this issue and orders the Company to make the appropriate revisions as part of the compliance filing the Company must file regarding other issues related to the Company's cost model for collocation line sharing.

(6) Verizon Port-at-a-Time Splitter Provisioning

242 Verizon requests that where the Company owns and provides splitters to CLECs, it be permitted to provide them from "a common pool of splitters on a "port-at-a-time" basis."²⁵⁴ Verizon claims that a common pool of Verizon-owned splitters for all CLECs to share is the most efficient means of providing splitters in a central office.²⁵⁵

Discussion and Decision

243 No other party briefed this issue. The Commission finds Verizon's arguments to be persuasive and approves the proposal as it applies to Verizon-owned splitters.

²⁵² *Part A Post Hearing Brief of Covad and Rhythms* at para. 82.

²⁵³ *Reply Post Hearing Brief of Verizon* at para. 33.

²⁵⁴ *Post Hearing Brief of Verizon* at para. 60.

²⁵⁵ *Ibid.*

(7) Efficient Splitter Configuration

- 244 The Commission has determined that it cannot, at this time, require ILECs to allow splitter placement on their MDFs or within 25 feet of their MDFs. However, there remains the question whether Qwest should be allowed to recover costs associated with the use of an IDF in the Company's interconnection tie pair charge.²⁵⁶
- 245 The DLECs argue that the FCC, in making collocation available to competitors, ordered that an ILEC may not require competitors to use an intermediate interconnection arrangement because such intermediate points of interconnection simply increase collocation costs without a concomitant benefit. According to the DLECs, this means that ILECs are prohibited from passing on the cost of an IDF to CLECs. The DLECs argue that the Commission has previously expressed scepticism regarding the utilization of another type of IDF called a SPOT frame.²⁵⁷
- 246 Qwest responds that the DLECs request is inconsistent with the terms of the interim line sharing agreement that Qwest has negotiated with the DLECs.²⁵⁸ The agreement provides that Qwest "will install and maintain the splitter in one of three locations in the central office: (i) in a relay rack as close to the CLEC DS0 termination points as possible; (ii) where an intermediate frame is used, on that frame; or (iii) where options (i) or (ii) are not available, on the main distribution frame or in some other appropriate location."²⁵⁹ The Company goes on to assert that because this agreement allows the CLEC to choose where the splitter is located in a particular central office, (within the physical and practical limitations in the specific office), it is reasonable that charges be assessed in accordance with the configuration selected.²⁶⁰
- 247 Qwest disputes the assertion that ILECs are prohibited from assessing IDF-related

²⁵⁶ An interconnection tie pair enables connectivity between a distribution frame and various locations within a central office for access to UNEs.

²⁵⁷ *Part A Post Hearing Brief of Covad and Rhythms* at para. 79.

²⁵⁸ *Opening Brief of Qwest Corporation* at para. 35. *Opening Brief of Qwest* at para. 84.

²⁵⁹ *Id.* at para. 72.

²⁶⁰ *Id.* at para. 86.

charges, and cites the FCC's Line Sharing Order as support.²⁶¹ The Line Sharing Order mentions that one approach used by ILECs to connect splitters to loops is to deploy cable carrying the high frequency band signal to another MDF location (or to an IDF location) and then on to the DSLAM. Qwest argues that because this configuration was expressly contemplated in the FCC's order it is not prohibited.

Discussion and Decision

248 The IDF under consideration in this case differs from the SPOT frame issue that the Commission addressed in the 17th Supplemental Order. The SPOT frame was a technology that US WEST was attempting to require only CLECs to use for UNE access purposes. The IDF serves a completely different purpose and, as Qwest witness Hubbard testified, for some office configurations Qwest requires the use of an IDF for itself as well as for other carriers.²⁶² Therefore, use of an IDF, in the manner proposed by Qwest, meets the nondiscriminatory access requirement of Section 251(c)(3) the Act. We are guided by the 17th Supplemental Order where the Commission determined "that where U S WEST can show that it is using comparable intermediate frames for its own operations, the cost of SPOT frames can be charged to CLECs."²⁶³

249 Accordingly, the Commission finds that Qwest may recover costs associated with the use of an Intermediate Distribution Frame (IDF) in the Company's interconnection tie pair charge when that particular splitter collocation option is implemented. We note that the Interim Line Sharing Agreement between Qwest and the DLECs incorporates dispute resolution provisions contained in their interconnection agreements approved under Section 252 of the Act. Thus, there are processes in place enabling the DLECs to seek relief in the event that Qwest unfairly imposes IDF

²⁶¹ Line Sharing Order at para. 104-105.

²⁶² TR 721:17-722:1 (Hubbard). Further support for this view was given by Qwest witness Thompson who stated that the intermediate frame "...assumes a frame that is an existing US West-utilized frame, thereby shared with US West, unlike a SPOT frame, which is typically shared amongst CLECs." TR 519:16-21 (Thompson). Also, DLEC witness Zulevic acknowledged that there are places where an IDF makes sense, such as in multi-floor central offices, which he went on to acknowledge that Qwest has at least several of in major metropolitan areas. TR 978:21-980:25 (Zulevic).

²⁶³ 17th Supplemental Order at para. 318.

splitter collocation options.²⁶⁴

c. Collocation Costs for UNE and Interconnection Access

250 The Commission must resolve policy issues related to collocation for UNE and interconnection access, and technical issues regarding Verizon's and Qwest's collocation proposals.

i. Policy Issues

(1) *The Lack of Washington-Specific Data*

251 As is the case with the line sharing collocation cost models, discussed above, the Commission finds that UNE collocation cost models contain little or no Washington-specific data. Verizon's collocation cost study is based on data derived by averaging contractor invoices for collocation jobs in GTE's central offices in Texas and California.²⁶⁵ Qwest's collocation cost study is based on data collected through an analysis of 41 collocation jobs in several states (21 jobs were in Washington) and a separate study of five central offices, used for determining appropriate DC power costs, only two of which were from Washington.²⁶⁶

252 The Joint CLECs criticize Qwest's estimated costs and proposed prices because they are largely based on unsupported cost data from central offices outside the state, even though Qwest has completed over 450 caged and cageless collocation jobs in Washington.²⁶⁷

253 The Joint CLECs also argue that Qwest's DC Power Cable Installation costs are based on the average costs incurred in five central offices in different states, only two

²⁶⁴ This also corresponds to our decision regarding the usage of SPOT frames at para. 338 of the 17th Supplemental Order where we state that: "If U S WEST asserts that a SPOT frame is necessary in a particular location, the parties must resort to the alternative dispute resolution provision of their interconnection agreement to verify the need for, and the cost and price of, this and any other intermediate interconnection arrangement."

²⁶⁵ *Post Hearing Brief of Verizon* at para. 105.

²⁶⁶ *Opening Brief of Qwest Corporation* at para. 122.

²⁶⁷ *Joint CLEC Part A Post-Hearing Brief* at para. 55.

of which are in Washington. The Joint CLECs assert that Qwest provided no evidence demonstrating that these offices are representative of offices with collocation in Washington. Nor did Qwest explain its choice of these five offices.²⁶⁸

254 Commission Staff points out that one of these five central offices is located in Crystal, MN and required power cables of over 300 feet in length. Staff argues that the inclusion of this office in its study inflates Qwest's power cost estimate, and therefore the cost of collocation in Washington.²⁶⁹ In support of this assertion Staff points out that the average power cable length in Qwest's 41 collocation job study is greater than the average power cable length found in the 21 Washington central offices that were included in that study.²⁷⁰

255 Qwest responds that it made available to all parties the vender invoices and purchase orders used in its collocation cost study. Qwest acknowledges, however, that it did not provide actual cost data for all collocation jobs performed in Washington over the past 2½ years.²⁷¹

256 Regarding Verizon's collocation cost study, the Joint CLECs assert that though Verizon has constructed 45 collocation cages in Washington, the Company relies on data drawn from various central offices in Texas and California and disregards Washington-specific data.²⁷²

257 Verizon responds that it should not be forced to limit its central office sample used to develop collocation costs to a single state's activity. According to Verizon, collocation activity within a state may not give Verizon a large enough study sample to accurately develop average costs. Therefore, using a broad sample of collocation projects nationwide permits Verizon to develop a more representative estimate of

²⁶⁸ *Id.* at para. 69.

²⁶⁹ *Opening Brief of Commission Staff* at para. 55.

²⁷⁰ *Response Brief of Commission Staff* at para. 17. Review of Exh. C-67, shows that the average power cable lengths from Qwest's entire 41 collocation job study are, approximately, 32% greater than the average of the power cable lengths for the 21 Washington collocation jobs.

²⁷¹ *Reply Brief of Qwest* at p. 19, footnote 2.

²⁷² *Joint CLEC Part A Post-Hearing Brief* at para. 87.

collocation costs that will be incurred in any given state.²⁷³

Discussion and Decision

258 During the course of these proceedings this Commission has indicated that Washington-specific data inputs are preferable for use in determining costs that CLECs are required to bear for access to an ILEC's network. For example, in the Commission's Eighth Supplemental Order, para. 136, we required that parties must present evidence on the actual lengths of loops in Washington State, rather than relying on regional or national data.

259 Nonetheless, while we maintain an interest in being able to review data specific to the LEC operating environment in Washington,²⁷⁴ we will not require further hearings in order to attain closure on these cost issues. The Commission will not require the ILECs to re-file collocation cost studies that contain more Washington-specific data.²⁷⁵ The parties have expended a considerable amount of time and effort to develop the record as it exists, and further delay does not assure a commensurate benefit. As we did in the case of collocation for line sharing, the Commission will review the record before it in this case, and make reasoned judgments as to what constitutes reasonable input values for the collocation cost studies presented for its consideration.

(2) *The Mark-up Issue*

260 The Joint CLECs request that the Commission limit Qwest's mark-up for TELRIC

²⁷³ *Reply Post Hearing Brief of Verizon* at para. 64.

²⁷⁴ The purpose of requiring Washington-specific data is to better verify that cost model inputs suggested by the ILECs are representative of the costs they will actually incur doing business in the state.

²⁷⁵ Regarding Verizon's argument that "a broad sample of collocation projects nationwide permits Verizon to develop a more representative estimate of collocation costs that will be incurred in any given state . . ." the Commission fails to see how samples from only Texas and California constitute a "broad sample of collocation projects nationwide." Verizon fails to explain why, for example, the 45 Washington caged collocation projects were not used to update Verizon's "broad sample" of 17 California and 7 Texas Caged Collocation projects. *See* Exh. C-294, GTE Response to Nextlink Data Request Number 4, pages 006 and 024, respectively.

and common costs to recurring charges, and they note that Verizon does not add any additional mark-up to its nonrecurring cost estimates.²⁷⁶ The Joint CLECs argue that applying this policy to both Verizon and Qwest would ensure consistency and minimize collocation costs.

Discussion and Decision

261 The Commission finds that this issue was addressed in the 17th Supplemental Order at para. 435, where the Commission accepted U S WEST's proposal to increase the NRC cost by 19.65 percent for attributed costs and 4.05 percent for common costs. Therefore, the Commission denies the request.

(3) Self Provisioning by CLECs in Qwest Central Offices

262 The Joint CLECs request the Commission to "require Qwest to provide, or authorize collocating CLECs to self-provision, CLEC to CLEC cross-connections in the Qwest central office."²⁷⁷ In response to this request Qwest notes that the current proceeding is a cost docket and not a terms and conditions docket.²⁷⁸

Discussion and Decision

263 The Commission agrees with Qwest. The current Phase A proceeding is a pricing proceeding and not a proceeding to determine terms and conditions. This issue is beyond the scope of this docket. Accordingly, the Joint CLECs' request is denied.

(4) Up-front Payment of Nonrecurring Startup Costs

264 Commission Staff proposes that CLECs be offered the option of paying nonrecurring startup costs over a 1-5 year time period, instead of paying the whole charge up-front.

²⁷⁶ Joint CLEC *Part A Post-Hearing Brief* at para. 83.

²⁷⁷ *Id.* at para. 84.

²⁷⁸ *Reply Brief of Qwest* at para. 81.

Qwest opposes Staff's proposal and directs the Commission's attention to the FCC's Second Report and Order in CC Docket No. 93-162,²⁷⁹ at para. 33, which states:

To the extent that the equipment needed for expanded interconnection service is dedicated to a particular interconnector, we believe that requiring that interconnector to pay the full cost of the equipment up front is reasonable because LECs should not be forced to underwrite the risk of investing in equipment dedicated to the interconnector's use, regardless of whether the equipment is reusable. To the extent that the equipment needed to provide expanded interconnection service is reusable, we believe that the pro rata refund requirement that we set forth in Section II.B.6 below properly compensates interconnectors for the assets for which they have already paid fully, but that the LEC can use to provide service to another company after the interconnector disconnects. At the same time, LECs will not recover twice the cost of reusable equipment. We conclude, therefore, that LECs may impose a nonrecurring charge for equipment, if such charges are developed in accordance with the requirements set forth in this section of the Order.

Discussion and Decision

265 The Commission concurs with the FCC's opinion that requiring an interconnector to pay nonrecurring startup costs up-front is a reasonable requirement.

ii. Technical Issues

(1) Technical Issues Regarding Verizon's Proposal

266 Numerous collocation costs proposed by Verizon either were not contested -- or were

²⁷⁹ *In the Matter of Local Exchange Carriers' Rates, Terms, and Conditions for Expanded Interconnection Through Physical Collocation for Special Access and Switched Transport*, FCC 97-208, CC Docket No. 93-162, Second Report and Order (June 13, 1997) at para. 33.

endorsed -- by other parties.²⁸⁰ The contested technical elements of Verizon's cost study to be resolved by the Commission are as follows:

- (a) Cage Enclosure
- (b) Floor Space Rental
- (c) Building Modification
- (d) DC Power
- (e) Environmental Conditioning
- (f) Cable Splicing

(a) Cage Enclosure

267 According to Verizon, its collocation cost study models the two elements required to build a co-locator's cage: the cage enclosure itself, and the cage gate providing access and security to the cage.²⁸¹ Verizon states that it derived these costs by averaging contractor invoices for collocation jobs in GTE central offices in Texas and California and then adjusting the values derived to arrive at a Washington-specific cost.²⁸²

268 The Joint CLECs assert that Verizon's cost estimates for Cage Enclosure should not be used as the basis for Cage Enclosure Charges.²⁸³ One of the deficiencies that the Joint CLECs allege is Verizon's use of the Nation Construction Estimator ("NCE") in deriving its costs. The Joint CLECs assert that the NCE, itself, cautions that its area modification factors will not necessarily be accurate when estimating the cost of any particular part of a building.²⁸⁴ The Joint CLECs argue that this inaccuracy is revealed by the 75% difference between the California and Texas cage construction

²⁸⁰ *Post Hearing Brief of Verizon* at para. 103; *See also Joint CLEC Part A Post-Hearing Brief* at para. 85.

²⁸¹ *Post Hearing Brief of Verizon* at para. 105. *Joint CLEC Part A Post-Hearing Brief* at para. 85, mentions a third element, the Cage Grounding Bar.

²⁸² *Post Hearing Brief of Verizon* at para. 105. The issue of the inclusion, or lack there-of, of Washington specific data gathered from Washington collocation cage installation projects has been already discussed above in Para. 251-59 and so will not be dealt with here.

²⁸³ *Joint CLEC Part A Post-Hearing Brief* at para. 86.

²⁸⁴ *Id.* at para. 88; *see also* Exh. RC-294 at p. 81.

costs when these are adjusted to create a national average, when, according to Verizon's methodology, they should be roughly the same.²⁸⁵

269 The Joint CLECs argue that Verizon's use of this national average to estimate vendor engineering and overhead costs, which were converted to per-foot costs and added to the fencing per-foot costs, is flawed. According to the Joint CLECs, the resulting calculation of contractor mark-up can exceed the underlying costs to construct the cage. Furthermore, the Joint CLECs argue, this methodology is inconsistent with how Verizon calculates contractor mark-ups for other collocation construction elements.²⁸⁶

270 Finally, the Joint CLECs contend that Verizon, by spreading these contractor and other mark-ups evenly over all the contractor invoices for California and Texas, assumes that: 1) cage construction generates the same amount of engineering and vendor activities as other central office construction activities; and 2) that the same level of engineering and vendor activity will be required regardless of cage size, which significantly increases the costs of 100-square-foot and smaller cages. Furthermore, the Joint CLECs assert that Verizon then uses an average of the higher per-square-foot costs for 100, 75, 50, and 25 square-foot cages (\$12.92) to price cages that are 25 to 100 square feet, rather than use the 100-square-foot cost (\$10.43), even though no cage in Washington is less than 100 square feet. The result, according to the Joint CLECs, is that Verizon's cost estimates are inflated beyond reasonable levels.²⁸⁷

271 The Joint CLECs recommend that the Commission authorize Verizon to charge its proposed Cage Enclosure charges only if those charges include Fencing, Gate, Site Modification, and Electrical costs. The Joint CLECs further recommend that Grounding costs should either be segregated into a separate element at the cost Verizon has estimated, or included in Verizon's Cage Enclosure rates with a

²⁸⁵ Joint CLEC *Part A Post-Hearing Brief* at para. 88.

²⁸⁶ Joint CLEC *Part A Post-Hearing Brief* at para. 89.

²⁸⁷ *Id.* at para. 90.

corresponding increase in the proposed rates to reflect this additional element.²⁸⁸

272 Verizon responds that for cost elements that do not vary significantly from state to state, Verizon relied on its actual experience in California and Texas as a reasonable estimate of the future costs it would incur in Washington. According to the Company, its methodology for then making adjustments for costs that do not vary from state to state, such as shipping, was reasonable and based on standards widely practiced and accepted in the construction industry.²⁸⁹

273 Verizon further argues that it does not add an additional mark-up to its cage construction costs, as alleged. Rather, Verizon maintains that its cost study takes whatever a vendor has identified as its mark-up costs and spreads this expense across all cost elements contained in the cage construction category on a percentage basis.²⁹⁰

274 Verizon states that it does not object to segregating grounding costs into a separate element.²⁹¹

Discussion and Decision

275 Verizon's witness Richter credibly testified that discrepancies caused by adjusting the California and Texas cage costs using the National Construction Estimator would not necessarily result in the same number, due to the fact that there are differences in the gates used for cage construction in each state.²⁹² Although Mr. Richter's testimony satisfactorily addresses the Joint CLEC's objection based on the differences between adjusted costs for California and Texas, it also exposes a deficiency in Verizon's approach to modeling its cage costs.

276 Verizon claims that its modeling approach provides a reasonable estimate for those cost elements that do not vary significantly from state to state, and so provides a

²⁸⁸ *Id.* at para. 91.

²⁸⁹ *Reply Post Hearing Brief of Verizon* at para. 65.

²⁹⁰ *Id.* at para. 67.

²⁹¹ *Id.* at para. 68.

²⁹² TR 1437:10-1438:11.

reasonable estimate for cage costs in Washington.²⁹³ However, gate costs, which Verizon included in those cage costs that it modeled using the NCE, vary significantly as reflected by the adjusted National Average gate costs for California of \$709, versus \$396 for Texas.²⁹⁴ Verizon also states that the gates the Company uses in Washington are more like the gates the Company uses in Texas.²⁹⁵

277 The record is devoid of Washington cost data regarding caged collocation jobs even though Verizon has performed 45 jobs in this state as of June 2000. If Washington gates are more like Texas gates, then the cost for Washington gates should also be more like the cost for Texas gates. Accordingly, Verizon's model does not provide a just and reasonable estimate for gate costs in Washington because it includes data based on significantly higher gate costs incurred in California.

278 We require that Verizon make a compliance filing of its model using only the cost of Texas cage gates, indexed to a national average and then adjusted to account for Washington-specific differences, as its cost in Washington.

279 Verizon must also modify its application of vendor engineering and overhead costs ("mark-up costs") to its fencing costs. Verizon's cost study purportedly takes whatever a vendor has identified as its mark-up costs and spreads this expense across all cost elements contained in the cage construction category (including fencing costs) on a percentage basis. However, this is not always the case.

280 For example, Exh. C-294 discloses that Verizon did not apply vendor mark-up costs to the electrical cost element in its California data.²⁹⁶ Consequently, higher mark-up costs were applied to other cost elements. Further, the electrical cost element could

²⁹³ *Reply Post Hearing Brief of Verizon* at para. 65.

²⁹⁴ TR 1500:18 (Ritcher). *See also* Exh. 291 at 8-WA9.

²⁹⁵ TR 1438:12-1439:5 (Ritcher).

²⁹⁶ Data Response to NEXTLINK, et al. Data Request 4 (Exh. C-294). Compare, for example, confidential data on page 006 with that found on page 007. This element includes the cost, which presumably covers installation and engineering, of one A/C outlet, cage grounding and overhead lighting.

be quite substantial (in at least one office it comprised over 50% of the total GTE Cost Breakdown), and Vendor mark-ups applied to the total cost of the GTE Cost Breakdowns for the California offices appear to average about 8% of total cost. Verizon's proposal that a 48% vendor engineering and overhead cost factor apply to cage enclosure costs appears significantly overstated.²⁹⁷

281 In order to more accurately apply mark-up costs derived from vendor engineering and overhead costs to fencing costs, we direct Verizon to make a compliance filing that either: 1) applies the vendor mark-ups appearing in the Company's California data to all cost elements appearing on the GTE Cost Breakdowns for the California offices; or 2) strips out all vendor markups from its estimated fencing costs for Texas and California and applies a 24.75% markup and spreads this expense across all cost elements contained in the cage construction category on a percentage basis, consistent with Verizon's common cost mark-up factor established in the 17th Supplemental Order.²⁹⁸

282 The Commission agrees that grounding costs ought to be segregated into a separate element and we direct Verizon to make that part of its compliance filing.

(b) Floor Space Rental

283 The Joint CLECs express concern regarding the methodology that Verizon used to calculate its floor space rental charge, but do not propose any modifications. Instead, the Joint CLECs propose that the Commission address this concern in connection

with Verizon's Building Modification and Environmental Conditioning elements, discussed in the next section.²⁹⁹

Discussion and Decision

284 The Commission agrees with the Joint CLECs' proposal and thus approves Verizon's

²⁹⁷ Exh. 291 at p. 8-WA 10.

²⁹⁸ See 17th Supplemental Order at para. 196-204.

²⁹⁹ Joint CLEC *Part A Post-Hearing Brief* at para. 92.

proposed Floor Space Rental Charge, along with any changes to this charge that may result from required modifications to Verizon's Building Modification and Environmental Conditioning elements, as discussed below.

(c) Building Modification

285 The Joint CLECs propose several modifications to the costs underlying Verizon's monthly recurring Building Modification charge of \$157.94 per request. The Joint CLECs assert that the following costs are overstated: (1) Security, (2) Site Modification, and (3) Electrical.³⁰⁰

(i) Security

286 Verizon includes two cost categories under this heading: a) a Card Reader and Controller system to manage and track persons who enter central office premises; and b) Storage Security to install locks on existing equipment cabinets. The Joint CLECs argue that Verizon's proposal to split the costs of the Card Reader and Controller equally among itself and four collocating carriers³⁰¹ is unreasonable because Verizon makes far greater use of its central office space than collocating carriers.³⁰² The Joint CLECs assert that charges imposed on a per-employee or per-security-card basis would be more reasonable and more in keeping with security system usage, and consistent with the FCC's Advanced Services Order and 47 C.F.R. §51.507.³⁰³

287 The Joint CLECs also contend that Verizon's Storage Security costs are rough guesses based on cost information that comes from an unidentified source, and thus are unreliable.³⁰⁴ They argue that Verizon should be required to share the costs of installing storage cabinet security and that Verizon's proposal that collocating CLECs should bear all related costs is discriminatory.³⁰⁵ The Joint CLECs urge the

³⁰⁰ *Post Hearing Brief of Verizon* at para. 119-124.

³⁰¹ This is the number of co-locators, on average, that Verizon assumes will be in Washington Central Offices. TR 1518:19-21.

³⁰² Joint CLEC *Part A Post-Hearing Brief* at para. 94.

³⁰³ *Ibid.*

³⁰⁴ *Id.* at para. 96.

³⁰⁵ Joint CLEC *Part A Post-Hearing Brief* at para. 95.

Commission to disallow all of Verizon's proposed Security charges, or alternatively, Verizon should only be permitted to recover its Card Reader and Controller costs as a separate element as Qwest proposes, and not as part of Verizon's monthly recurring charge for Building Modification.³⁰⁶

288 Verizon argues that the security measures related to the Card Reader and Controller system are measures that the Company takes as the direct result of the CLECs' presence in its central office space without regard to space usage or frequency of access.³⁰⁷ Verizon also argues that but for the CLECs' presence in their central offices, Verizon would not have to secure its equipment cabinets.³⁰⁸ Verizon therefore proposes that the CLECs bear all Storage Security costs. Verizon admits that conceptually, Qwest's proposed security charge structure appears similar to its proposal. Verizon maintains, however, that its proposal is easier to implement.³⁰⁹

Discussion and Decision

289 47 C.F.R. §51.507 calls for, among other things, recovery of the costs of shared facilities in a manner that efficiently apportions costs among users. Verizon's proposal that it share apportionment of Card Reader and Controller related costs complies with the federal rule, as well as the FCC's Advanced Services Order. These costs are appropriate and are incurred regardless of whether a party gains access to a central office location one time or a thousand times. Every party possessing equipment maintained in a central office benefits from the implementation of secured access, regardless of how many times they enter the work space. The Commission finds that Verizon's costs and apportionment of costs are just and reasonable, and we approve the Company's Card Reader and Controller proposal.

290 We disagree, however, with Verizon's proposed recovery of Storage Security costs. Verizon claims that it developed these costs based on estimates from contractors who perform this type of activity. Verizon can not, however, identify the contractors who were contacted, and its estimates appear to be based on unsubstantiated speculation.

³⁰⁶ *Ibid.*

³⁰⁷ *Reply Post Hearing Brief of Verizon* at para. 71.

³⁰⁸ *Id.* at para. 72.

³⁰⁹ *Id.* at para. 73.

The Commission rejects Verizon's proposed Storage Security costs because those costs are excessively subjective and lack reliable supporting evidence.

291 We also have doubts whether Verizon's Storage Security costs are caused by collocating CLECs and whether Verizon should recover security costs that do not benefit all parties. We note that Verizon is not required to share similar costs incurred by other carriers that install secure equipment cabinets or caged enclosures due to similar concerns. However, we do not reach this decision because Verizon fails to present reliable data in support of its Storage Security costs.

(ii) Site Modification

292 Verizon proposes to recover three types of site modification costs: (a) Demolition and Site Work, (b) Ventilation Ducts ("Minor HVAC"), and (c) Dust Partition.³¹⁰ The Joint CLECs dispute the Demolition and Dust partition costs proposed by Verizon, on the grounds that Verizon estimates the costs for these activities based only on an average of the Texan and Californian central offices in which those costs were incurred, even though these offices constitute only a small proportion of the offices in Verizon's study. This methodology, the Joint CLECs assert, assumes that all central offices in Washington will incur these costs, which inflates costs for CLECs.³¹¹

293 The Joint CLECs further assert that Verizon improperly estimated its costs for Ventilation Ducts by averaging only the costs incurred in central offices where those activities were required rather than all central offices in the sample. Furthermore, the Joint CLECs argue that even though Verizon adjusted its proposed costs for Ventilation Ducts to be more consistent with its supporting documentation, it still suffers from inconsistencies.³¹² The Joint CLECs state that in making adjustments in response to Bench Request Number 11, Verizon adjusted its California Minor HVAC costs, but it failed to similarly adjust its Texas Minor HVAC costs, which used the

³¹⁰ Joint CLEC *Part A Post-Hearing Brief* at para. 97. See also, *Post Hearing Brief of Verizon* at para. 121-123.

³¹¹ Joint CLEC *Part A Post-Hearing Brief* at para. 98.

³¹² *Id.* at para. 99.

California costs as a proxy (no Minor HVAC costs were available for Texas).³¹³

294 The Joint CLECs argue that the Commission should disallow any charge based on Verizon's estimates for Site Modification because the Company fails to use Washington-specific cost estimates. Alternatively, they request that we require Verizon to recalculate its cost estimates to average the Demolition, Minor HVAC, and Dust Partition costs across all central offices in the sample, not just those where such costs were incurred, and to adjust the Texas Minor HVAC costs and related cost averages to be consistent with supporting documentation.

295 Moreover, the Joint CLECs propose that these costs should be part of the nonrecurring charge for the Cage Enclosure or cageless site preparation, rather than being structured as a recurring charge.³¹⁴ The Joint CLECs also argue that if these charges are made non-recurring, they should be included in the Cage Enclosure element at the rates that Verizon currently proposes to charge for fencing alone, and that Verizon should establish a separate rate that recovers applicable costs for cageless collocation as part of its site preparation charge.³¹⁵

296 In response to the suggestion that its site modification costs be spread across all offices in its sample, Verizon argues that the result would artificially decrease Verizon's costs and that site modification costs are more appropriately spread only across those central offices in which the activities occur.³¹⁶ Regarding the suggestion that these costs be made part of the nonrecurring charge for caged or cageless site preparation, Verizon states that it will not necessarily carry out its building modification activities in conjunction with providing cage enclosures, and that the rate structure reflects costs as they are currently incurred.³¹⁷ Moreover, Verizon asserts that combining building modification costs and cage enclosure costs into one rate element would foreclose the option currently available to a CLEC to chose

³¹³ *Ibid.*

³¹⁴ *Id.* at para. 100.

³¹⁵ Response Testimony of Rex Knowles, Exh. T-151 at pp. 10-12.

³¹⁶ *Reply Post Hearing Brief of Verizon* at para. 75.

³¹⁷ *Id.* at para. 76.

another vendor to provide its cage enclosure."³¹⁸

Discussion and Decision

297 The Commission is troubled by Verizon's assumption, implicit in its methodology of calculating its Demolition, Minor HVAC, and Dust Partition cost estimates, that all Washington central offices will incur these costs at the same level as the small proportion of central offices Verizon used to derive these costs. Verizon witness Richter testified that not every central office necessarily requires the activities that generate these costs and that the Verizon model merely develops a cost for these activities should they prove necessary.³¹⁹ We are unable to find in the record any statement as to whether or not these charges would be deducted from Verizon's proposed monthly Building Modification Charge for CLECs whose collocation requests do not require these activities.

298 The Commission finds no reason why these costs should not be made non-recurring costs and segregated as separate non-recurring cost elements, as we decided to do with grounding costs. This cost treatment will better ensure that only those CLECs that actually incur costs will be required to pay. However, we are not persuaded by the Joint CLECs' arguments that these activities should be included in Verizon's Cage Enclosure element at the rates that Verizon currently proposes to charge for fencing.

299 Accordingly, we direct Verizon to make a compliance filing that converts its Demolition, Minor HVAC, and Dust Partition cost estimates to non-recurring costs and segregates these items into separate non-recurring cost elements to be applied on an as needed basis for caged and cageless collocation. We further direct Verizon to ensure that the adjustments it made in response to Bench Request Number 11 are also applied to its Texas cost estimates.

(iii) Electrical

300 As with the Demolition, Minor HVAC, and Dust Partition cost elements, the Joint

³¹⁸ *Ibid.*

³¹⁹ TR 1455:1-1456:9 (Ritcher).

CLECs argue that the Lighting and Electrical Outlet elements of Electrical should be made non-recurring and included in the Cage Enclosure element at the rates that Verizon currently proposes to charge for fencing alone. For cageless collocation they propose that Verizon establish a separate rate that recovers the applicable costs as part of the cageless collocation site preparation.³²⁰

301 The Joint CLECs also assert that Verizon should recalculate the Floor Grounding Bar cost component of its proposed Electrical costs so that those costs reflect a facility that is shared with Verizon and other collocating CLECs. Further, Verizon should either make this cost into a separate non-recurring charge for Grounding, or include it in the Cage Enclosure element costs in the manner discussed for the Lighting and Electrical Outlet elements.³²¹

302 The Joint CLECs argue that Verizon fails to identify any legitimate purpose to dedicate such a facility to CLECs rather than use a shared facility, and they contend that the equipment co-locators use must meet the same safety standards as Verizon's equipment and often is exactly the same equipment that Verizon has deployed. Finally, the Joint CLECs conclude that the assumption of the Grounding Bar as a facility dedicated to individual CLEC use unnecessarily inflates CLEC costs.³²²

303 Verizon makes the same counter-arguments in response to making the Lighting and Electrical Outlet elements non-recurring as it advanced against the same proposal for the Demolition, Minor HVAC, and Dust Partition cost elements. Verizon states that it "would not object to recovering the costs of a floor grounding bar through a separate grounding non-recurring charge."³²³

304 However, Verizon opposes making the grounding bar a shared cost and argues that: 1) it cannot be expected to share grounding bar costs with CLECs because these are placed in the immediate vicinity of CLEC collocation areas, which are typically not in the immediate vicinity of Verizon's own equipment (thus, sharing a grounding bar

³²⁰ Joint CLEC *Part A Post-Hearing Brief* at para. 101 and Response Testimony of Rex Knowles, Exh. T-151 at pp. 10-12.

³²¹ Joint CLEC *Part A Post-Hearing Brief* at para. 101.

³²² *Ibid.*

³²³ *Reply Post Hearing Brief of Verizon* at para. 79.

with a CLEC would require the CLEC to have longer grounding cables, thereby raising grounding cable costs); and 2) establishing a separate grounding bar for CLECs will make it easier to isolate the source of any problems relating to grounding.³²⁴

Discussion and Decision

305 Regarding Verizon's Lighting and Electrical Outlet elements, the Commission finds that these should be converted to non-recurring costs and segregated into separate non-recurring cost elements for caged and cageless collocation, consistent with our decision regarding Demolition, Minor HVAC, and Dust Partition cost elements, and we reiterate our decision that the ground bar cost should be recovered through a separate grounding non-recurring charge.³²⁵

306 We are not persuaded that the ground bar cost should be modified into a shared cost. Verizon proposes to install a cage grounding bar and to run a connecting ground cable to the floor grounding bar.³²⁶ CLECs would then run grounding cables from their equipment to the cage grounding bar. If a CLEC is unable to collect their equipment grounds into one cable, its costs would substantially increase in order to connect multiple grounding cables to a shared floor grounding bar. We direct Verizon to make a compliance filing incorporating these decisions regarding electrical elements.

(d) Direct Current (DC) Power Supply

307 Both Commission Staff and the Joint CLECs express concern with aspects of Verizon's proposed costs for DC power supply. Staff asserts that Verizon's estimated labor rate of 15 minutes per foot for power cable placement is too high and is unverifiable. Staff points out that the R.S. Means Electrical Cost Data produced by Qwest uses different labor rates depending on the size of cable being placed, with the amount of time required for the largest cable being about three times as long as the

³²⁴ *Reply Post Hearing Brief of Verizon* at para. 78.

³²⁵ *See* Para. 282.

³²⁶ *See* Exh. 291, p. 8-WA 7.

time required for the smallest cable.³²⁷ Staff notes that Verizon acknowledges that installation time varies with cable size and length³²⁸ and that Qwest's cost study also shows that the largest cable takes about three times as long to install as the smallest cable.

308 Staff also expresses concern that CLECs ordering 400 amps of power would be charged for more cable pulls than necessary under Verizon's assumption of two cable pulls for every 40 amps of power.³²⁹ Staff recommends that the Commission either require Verizon to rerun its study and provide verifiable data, or adopt Staff's suggested cable installation times of three to five minutes per foot.³³⁰

309 The Joint CLECs generally support Staff's suggestions, but raise some additional concerns of their own.³³¹ The Joint CLECs argue that Verizon's proposed monthly recurring charge of \$513 for 40 amps of DC power is actually double that amount because Verizon charges on a per-feed basis and the Company proposes to provide DC power to collocating CLECs through two feeds (A and B feeds, one being a back-up feed). The Joint CLECs go on to assert that:

Verizon developed its proposed rate by estimating the total costs associated with obtaining AC power from the power company, converting that power to DC power batteries, and delivering that power to points within the central office. Verizon divided those costs by the facilities' amperage capacity and then multiplied the per amp price by 40 amps. Qwest also uses this basic methodology and charges on a per-amp basis. Unlike Qwest, however, Verizon proposes to charge not only per amp but per feed, effectively charging a CLEC for 80 amps of power when the CLEC has ordered - and Verizon is providing - only 40 amps.³³²

³²⁷ See Exh. C-64, R.S. Means Company, Inc. ("R.S. Means"), *Electrical Cost Data*, 23rd Annual Edition, Conductors and Cables.

³²⁸ See Exh. T-293 at p. 10.

³²⁹ *Opening Brief of Commission Staff* at para. 60-61.

³³⁰ *Id.* at para. 62.

³³¹ Response Testimony of Rex Knowles, Exh. T-151 at pp. 10-12.

³³² *Joint CLEC Part A Post-Hearing Brief* at para. 102.

- 310 The Joint CLECs argue that the Commission should authorize Verizon to levy a monthly recurring charge of no more than \$513 for 40 amps of DC power, including both A and B feeds.³³³
- 311 Verizon argues that the Commission should reject Staff's proposed time estimates for DC power cable installation on the grounds that the R.S. Means data upon which it appears to rely is for the time necessary to place cable within a conduit already installed at the central office. According to Verizon, there are two significant problems with this assumption: (1) it is much easier and takes significantly less time to pull cable through conduit using a pull line; and (2) no cost or time is included to install the conduit upon which the assumption is based, even though such conduit would not be available in the central office for this purpose.³³⁴
- 312 Verizon argues that its single labor rate of 15 minutes per foot of cable installed is an average representing the time it take to place cable on a rack and perform all necessary activities.³³⁵ Furthermore, Verizon contends that this interval is used by Verizon itself in creating work orders for its own cable pulls.³³⁶ Verizon also argues that its approach permits greater predictability in CLEC charges because a CLEC will not know the size of the cabling necessary to provide power until after that cable is pulled.³³⁷
- 313 Verizon confirms that it proposes to charge \$513 for each of the A and B feeds, providing full requested capacity on each. According to Verizon, this provides the CLECs with the potential to simultaneously use both A and B feeds because Verizon has no way to monitor how that power is actually used. Consequently, Verizon believes it is appropriate to develop a capacity-based charge.³³⁸

Discussion and Decision

³³³ *Id.* at para. 103.

³³⁴ *Post Hearing Brief of Verizon* at para. 131.

³³⁵ *Reply Post Hearing Brief of Verizon* at para. 80.

³³⁶ *Ibid.*

³³⁷ *Id.* at para. 81.

³³⁸ *Id.* at para. 83.

- 314 Verizon persuasively argues against Staff's suggestion of three to five minutes per foot for DC power cable pulls. Furthermore, the record shows that Verizon's 15 minute estimate compares favorably with the labor time estimates used by Qwest in modeling their DC power cable pulls, casting doubt on the efficacy of requiring Verizon to break out this labor time by the size of cable installed. Accordingly, the Commission accepts Verizon's proposed labor rate of 15 minutes per foot for DC power cable pulls.
- 315 With respect to Staff's concerns regarding Verizon's methodology to determine the number of cable pulls, Exhibit 806 persuades us that Verizon's proposed average of two cable pulls for every 40 amps of power is a reasonable estimate.
- 316 The Commission believes that the Joint CLECs present a strong argument regarding Verizon's proposed monthly recurring charge of \$513 for 40 amps of DC power. We agree with the Joint CLECs' argument that a CLEC should be compelled to pay only for power capacity it contracts for, regardless of whether that power is delivered over the main A power feed, or, when necessary, over the back-up redundant B power feed.
- 317 We are not persuaded by Verizon's argument that because Verizon cannot determine at any given time which of the two power feeds a CLEC will utilize in drawing its requested power capacity, it is necessary to levy a monthly charge on both feeds. This assumption, as the Joint CLECs have correctly pointed out, presumes that a CLEC requesting a power capacity of 40 amps per month would be drawing 40 amps per month over the main A feed, as well as over the redundant B feed, thereby resulting in the CLEC being billed for 80 amps of power per month when it only requested 40 amps per month. The Commission finds nothing in the record to justify this practice.
- 318 Accordingly, the Commission rejects Verizon's proposed monthly recurring charge of \$513 per month for 40 amps of power per feed and directs Verizon to make a compliance filing whereby Verizon's monthly recurring power costs are recalculated on a per-amp basis only, rather than on the proposed per-amp per-feed basis.

(e) Environmental Conditioning

- 319 The Joint CLECs argue that Verizon's proposed monthly recurring charge for

Environmental Conditioning (the HVAC necessary to keep collocated equipment at optimal temperatures) is unreasonable because it assumes that a stand-alone HVAC system dedicated to the use of collocated CLECs will be installed in every Washington central office where collocation is requested.³³⁹ According to the Joint CLECs, Verizon concedes that it does not always construct such a system.³⁴⁰ The Joint CLECs argue that this assumption unnecessarily increases CLECs' costs, and that it is also inconsistent with how Verizon models its proposed Building Modification element, where the Company assumes that an existing HVAC system must be modified for each collocating CLEC.³⁴¹

320 In response, Verizon argues that its environmental conditioning charges are based on actual activities performed by the Company, and are based on known data regarding the number of co-locators in Verizon's central offices and their requests for amperage.³⁴² Verizon claims that its proposed prices recover costs directly attributable to the CLECs, regardless of whether those costs relate to dedicated or shared HVAC systems.³⁴³

Discussion and Decision

321 The Joint CLECs raise a valid point, and Verizon admits that it does not construct a stand-alone HVAC system for co-locators in each of its central offices in Washington, because existing systems may have sufficient HVAC in the existing system for the requested amps.³⁴⁴ Verizon's proposed cost (which assumes the purchase and installation of a stand-alone redundant HVAC system) shared by four co-locators fails to adequately capture the costs that would be incurred by collocating

³³⁹ Joint CLEC *Part A Post-Hearing Brief* at para. 104. The Commission takes note of the fact that Verizon's assumption is that the average number of 4 collocated CLECs it had modeled as collocating in a Verizon central office would share this HVAC unit. (*See*, for example, TR 1461:2-8 (Richter).

³⁴⁰ Joint CLEC *Part A Post-Hearing Brief* at para. 104.

³⁴¹ *Id.* at para. 105.

³⁴² *Reply Post Hearing Brief of Verizon* at para. 84.

³⁴³ *Ibid.*

³⁴⁴ TR 1464:2-5 (Richter).

CLECs in the event that an existing HVAC system is sufficient to meet the demands of all carriers.

322 Accordingly, the Commission rejects Verizon's proposed monthly recurring charges for Environmental Conditioning as they are currently structured. We direct Verizon to make a compliance filing of its collocation cost model incorporating a separate charge element to recover those HVAC costs which a collocating CLEC would incur in the event that it shares an existing central office HVAC system with Verizon and other collocating CLECs. The Commission finds that Verizon's current proposed monthly recurring rate for HVAC is a just and reasonable rate for those situations where a stand-alone HVAC system is required to accommodate co-locators' needs.

(f) Cable Splicing

323 The Joint CLECs argue that Verizon's proposed nonrecurring per-fiber charge for splicing fiberoptic cable interconnecting CLEC equipment with Verizon's network is too high and should be disallowed by the Commission.³⁴⁵ The Joint CLECs state that NEXTLINK pays its outside contractor \$28 per splice, and they propose that the Commission establish the same charge for Verizon.³⁴⁶ The Joint CLECs alternatively propose that the Commission require Verizon to permit CLECs to undertake their own fiber splicing outside of the central office.³⁴⁷

324 Verizon argues that NEXTLINK's sole source for its claim to paying \$28 per splice is one invoice from one splicing job in Utah for two sets of splicing 144 fibers. Verizon contends that this invoice is not sufficiently detailed to ascertain whether other splicing related costs (such as travel, tool, etc.), if any, were included in the \$28 figure.³⁴⁸

³⁴⁵ Joint CLEC *Part A Post-Hearing Brief* at para. 107.

³⁴⁶ *Ibid.*

³⁴⁷ *Ibid.*

³⁴⁸ *Post Hearing Brief of Verizon* at para. 135.

Discussion and Decision

- 325 The Commission rejects the Joint CLECs' proposal because data from that single invoice is relatively unreliable compared to Verizon's better documented and substantiated proposed splicing costs. Accordingly, the Commission accepts Verizon's proposed per fiber nonrecurring splicing charges.
- 326 Regarding the Joint CLECs' proposal that the Commission require Verizon to permit CLECs to undertake their own fiber splicing when this occurs outside the central office, the request is beyond the scope of this docket, which is a pricing proceeding. Accordingly, we deny the Joint CLECs' request.

(2) Technical Issues Regarding Qwest's Proposal

- 327 In the Seventeenth Supplemental Order the Commission chose to set U S WEST's interim prices to be the same as GTE's.³⁴⁹ We took that step because we believed that the assumptions contained in U S WEST's cost study were unreasonable and we believed that U S WEST's model was poorly documented.³⁵⁰ The Commission also concluded that U S WEST had failed to explain why its rates were out of line with its own federal tariff rates and with GTE's proposed rates.³⁵¹
- 328 The study that Qwest submits in this proceeding is an entirely new cost study that was created in 1999, and Qwest claims that it relies on actual data collected through an analysis of 41 collocation jobs in several states (21 of those jobs were in Washington).³⁵² While Qwest's new study is an improvement over its prior submission, the Commission finds that there are aspects of it that are troubling.
- 329 For example, the study is based on an analysis of invoices from the 41 collocation

³⁴⁹ 17th Supplemental Order at para. 321.

³⁵⁰ *Id.* at para. 305-321.

³⁵¹ *Id.* at para. 320.

³⁵² *Opening Brief of Qwest Corporation* at para. 122.

jobs mentioned earlier.³⁵³ Qwest did not offer these invoices as exhibits, and it limited access to these documents by other parties.³⁵⁴

330 Qwest's study has other documentation problems, and the Company has failed to adequately address these problems as requested by other parties. For example, the Joint CLECs assert that Qwest provided no explanation, or evidentiary support, of how the Caged expense inputs listed in the Company's collocation study were derived. The Joint CLECs go on to assert that this information was requested from Qwest, but it was never provided even though Qwest agreed to provide the information when available.³⁵⁵ The Joint CLECs also requested that Qwest explain why USWC selected five sites to develop average power and grounding feed costs and why each specific site was selected, and to explain how these sites were representative of Qwest's central offices in Washington.³⁵⁶ In each instance, Qwest's response was unreasonably terse and inadequate.

331 Another problem with Qwest's cost study is that it fails to make any comparison between Qwest's collocation rates and those proposed by Verizon. This failure is surprising given that the 17th Supplemental Order denied U S WEST's proposed interim rates for, among other reasons, the Company's failure to explain why those rates were so far out-of-line in comparison with GTE's.³⁵⁷

332 Problems caused by discrepancies between Qwest's and Verizon's proposed rates for collocation cost elements reappear in this proceeding. Qwest argues that: "There is no evidence whatsoever that Qwest's costs are the same as Verizon's; thus, rates based on Verizon's costs would not be "cost-based" as to Qwest."³⁵⁸ According to Qwest,

³⁵³ *Id.* at para. 124.

³⁵⁴ *Ibid.*

³⁵⁵ Joint CLEC *Part A Post-Hearing Brief* at para. 65.

³⁵⁶ Exh. 32, C-32, at para. b.

³⁵⁷ 17th Supplemental Order at para. 320. It should be noted that Qwest did file a comparison of its current proposed collocation rates with its federally tariffed rates, along with an explanation of what Qwest thinks are the reasons behind the differences in the two rates. These explanations seemed, for the most part, reasonable.

³⁵⁸ *Reply Brief of Qwest* at para. 48.

the imposition of Verizon's rates on Qwest is contrary to Sections 251(c)(6) and 252(d)(1) of the Act (just and reasonable rates for collocation; cost-based rates for interconnection and access to UNEs).

333 The Commission disagrees with Qwest's interpretation of the meaning and intent of these sections of the Act. The Commission has an obligation under the Act and FCC rules,³⁵⁹ and under state statutes to pick the most efficiently derived costs based on actual central office space and networking architecture. Using these guiding principles, the Commission believes that a determination as to whether rates are just and reasonable, as well as cost based, can only be made when those rates are judged in light of the prices other firms in the market are obtaining for similar services. The Commission employs these same principles in examining the collocation cost proposal submitted by Qwest.

334 The contested technical elements of Qwest's cost study to be resolved by the Commission are as follows:

- (a). Entrance Facilities
- (b). Space Construction
 - (i). Cage Enclosure
 - (ii). DC Power
 - (iii). Grounding/Back-up AC Power
- (c). Floor Space Rental
- (d). DS-0, DS-1 & DS-3 Terminations
- (e). Cable Splicing
- (f). Other Issues

(a) Entrance Facilities

335 The Joint CLECs assert that the rate proposed by Qwest for entrance facilities are as

³⁵⁹ The Commission notes that the FCC's Local Competition Order states: "The just and reasonable rate standard of TELRIC plus a reasonable allocation of the joint and common costs of providing network elements that we are adopting attempts to replicate, with respect to bottleneck monopoly elements, the rates that would be charged in a competitive market." Local Competition Order at para. 740.

much as 12 times the rates Verizon proposes for the same element.³⁶⁰ The Joint CLECs point out that the basis for Qwest's Entrance Facilities charges is the 41 cageless collocation job study Qwest performed, which, they contend does not include entrance facilities.³⁶¹ The Joint CLECs argue that another deficiency with Qwest's entrance-facility costing is that for those choices requiring a manhole to be drilled for CLEC use, Qwest assumes that it will be shared by CLECs only and not by Qwest as well.³⁶²

336 The Joint CLECs contend that this assumption violates the FCC's requirement that the costs of collocation infrastructure that is or can be jointly used by the ILEC and CLECs should be calculated according to each carrier's proportional usage of that infrastructure.³⁶³ The Joint CLECs request that the Commission require Qwest to charge no more than Verizon charges for entrance facilities.³⁶⁴

337 Qwest argues that Verizon's entrance facility rates are inappropriate because Qwest and Verizon have structured their rates differently, making a direct comparison difficult.³⁶⁵ Qwest contends that its study supports the entrance facility rates it proposes and that there is no evidence in the record that Verizon's costs are the same as Qwest's costs.³⁶⁶

Discussion and Decision

338 The Commission notes that the disparities between Qwest's and Verizon's proposed entrance facility rates remain as great as they were in the prior cost proceeding.³⁶⁷

³⁶⁰ Joint CLEC *Part A Post-Hearing Brief* at para. 56-57.

³⁶¹ *Id.* at para. 57.

³⁶² *Id.* at para. 58.

³⁶³ Joint CLEC *Part A Post-Hearing Brief* at para. 23.

³⁶⁴ *Id.* at para. 59.

³⁶⁵ *Reply Brief of Qwest* at para. 47.

³⁶⁶ *Id.* at para. 48.

³⁶⁷ *See, e.g.*, the 17th Supplemental Order at para. 313.

Our review of the record leads us to conclude that Qwest's proposed entrance facility rates are not based directly on the invoices underlying Qwest's 41 collocation job study. Rather, these rates are based on revisions to cost assumptions to account for the cost differences between cageless and caged collocation.³⁶⁸

339 Our conclusion is based on the following evidence:

- 1) Qwest stated several times during the course of this case that its study was conducted on cageless collocation jobs only;³⁶⁹
- 2) Qwest acknowledged that much of its caged collocation unit prices were derived from the invoices for cageless collocation;³⁷⁰
- 3) Qwest's caged collocation study was not based on actual caged collocation jobs, but was based on the general experience and knowledge of a "team of experts," which Qwest subsequently incorporated into its study;³⁷¹
- 4) Qwest witness Thompson, who supported the collocation cost studies submitted, testified that Qwest's cageless collocation study found that the collocators in its study used private line entrance facilities out of Qwest's tariff and not via the collocation offering;³⁷² and
- 5) Qwest assumed that no CLEC using cageless collocation would use an entrance facility as it was outlined under the collocation cost studies.³⁷³

340 Given the great disparities in price between Qwest's and Verizon's proposed entrance facility rates, and given the appearance that Qwest's rates are based primarily on the unverifiable assumptions of a team of experts, the Commission rejects Qwest's

³⁶⁸ Exh. T-331 at page 9 of 25.

³⁶⁹ *See, e.g.*, Exh. T-10 at page 6.

³⁷⁰ *Ibid.*

³⁷¹ Exh. 30.

³⁷² TR 349:5-17 (Thompson).

³⁷³ TR 350:2-6 . This is clarified at TR 939:2-13, where Qwest agrees that its study of 41 central office cageless collocations did not involve entrance facilities, and on that basis Qwest assumed that CLECs electing cageless collocation would not use entrance facilities.

proposed entrance facility rates and adopts those proposed by Verizon to be the permanent rates for both ILECs. Qwest is directed to make a compliance filing incorporating the Commission's decision.

(b) Space Construction

341 Space construction recovers the cost of engineering the job, constructing an enclosure around a CLEC's leased space, providing a single power feed, overhead structures to support cable racking and CLEC equipment, cable racking, additional lighting, and the supporting environmental requirements (heating ventilation and air conditioning). There are separate nonrecurring charges for caged and cageless collocation arrangements.³⁷⁴ Qwest notes that Commission Staff identified certain engineering charges included in the Space Preparation Charge that were mis-categorized as engineering labor when they were, in fact, installation labor charges.³⁷⁵ Qwest states that its investigation concurred with Staff and that these charges were removed, as illustrated in Exh. 21.³⁷⁶

342 The Joint CLECs argue that the inclusion of multiple rate elements for both caged and cageless collocation in Qwest's Space Construction element serves only to inflate its cost estimates and the amount CLECs must pay for collocation.³⁷⁷ The Joint CLECs further assert that Qwest fails to demonstrate how the rates for this element were derived.³⁷⁸ Furthermore, the Joint CLECs argue that when compared to equivalent rates for caged collocation proposed by Verizon, Qwest's proposed Space Construction rates for caged collocation are several times higher.³⁷⁹ The Joint CLECs recommend that the Commission require Qwest to segregate the sub-elements of Engineering, Cage/Bay Construction, Cable Racking, and DC Power into separate

³⁷⁴ *Opening Brief of Qwest Corporation* at para. 140.

³⁷⁵ *Id.* at para. 143.

³⁷⁶ *Ibid.*

³⁷⁷ *Joint CLEC Part A Post-Hearing Brief* at para. 62.

³⁷⁸ *Ibid.*

³⁷⁹ Response Testimony of Rex Knowles, Exh. T-151 at pp. 20-21.

elements and establish prices that are no higher than the rates proposed by Verizon.³⁸⁰

Discussion and Decision

343 The Commission agrees with the Joint CLECs regarding the difficulty of determining how Qwest's study arrives at the final Space Construction charge. For example, Exh. 12 presents a Caged Collocation Space Construction Initial Charge of \$56,145.24 for a cage of up to 100 square feet with a 40-amp feed. The Commission cannot ascertain how this figure was derived from the supporting spreadsheets supplied in Exh. C-15, nor is the Commission able to discern what assumptions were utilized in arriving at this figure.

344 Accordingly, the Commission adopts the Joint CLECs' recommendation that Qwest disaggregate the Space Construction charge into its separate sub-elements in order to allow CLECs to identify just what it is they are paying for. Qwest is directed to make a compliance filing which incorporates this decision of the Commission.

345 The Commission is concerned about the alleged disparity between Qwest's and Verizon's prices for caged collocation. Our review of the record convinces us that a disparity does, in fact, exist. We address pricing in our discussion of the other contested issues regarding Space Construction, which are: 1) Cage Enclosure; 2) DC Power; and 3) Grounding and Backup AC Power.

(i) Cage Enclosure

346 Cage Enclosure includes construction of chain-link fencing around the collocation space, the installation of standard electrical outlets within the caged area and lighting above it, and provision of heating, ventilation, and air conditioning (HVAC) to ensure proper temperature levels for the equipment installed in the caged area. Parties disagree regarding the appropriate cost of constructing this facility.

347 The Joint CLECs contend that Qwest acknowledges that its caged collocation unit prices were derived, in large part, from invoices for cageless collocation.³⁸¹ The Joint

³⁸⁰ Joint CLEC *Part A Post-Hearing Brief* at para. 64.

³⁸¹ *Id.* at para. 66.

CLECs propose that the Commission require Qwest to charge no more than \$5,000 for a 100-square-foot cage, including fencing, gate, lighting, AC outlets, and HVAC, in conformance with the invoiced cost of a cage enclosure constructed for one of the CLECs.³⁸²

348 Qwest responds that a single invoice, dating from 1997, from one contractor, is unreliable evidence of the cost that would prevail in Washington today.³⁸³ Qwest proposes that the Commission approve Qwest's costs and prices, as supported by its cost study, and to allow the CLECs to obtain cage construction from another vendor if lower costs can be achieved.³⁸⁴

Decision and Decision

349 The Commission is concerned that the study Qwest "conducted to determine the cost of cages, HVAC additions (primarily new ductwork), and AC electrical power required to build an average cage enclosure, the associated power outlets and environmental conditioning"³⁸⁵ is not based on actual caged collocation jobs. Qwest admits that its study is based on the general experience of its team of experts and their knowledge of jobs performed throughout Qwest's region.³⁸⁶ Data derived from this type of unverifiable and inaccessible process is impossible to audit and is wholly unreliable. Accordingly, the Commission adopts Verizon's cage enclosure prices as permanent prices for Qwest, and directs Qwest to make a compliance filing incorporating those prices into its cost study.

(ii) DC Power Cable Installation

³⁸² *Id.* at para. 67.

³⁸³ *Opening Brief of Qwest Corporation* at para. 145.

³⁸⁴ *Id.* at para. 146.

³⁸⁵ *Reply Brief of Qwest* at para. 57.

³⁸⁶ *See* Exh. 30.

350 The Joint CLECs point out that Qwest's DC Power Cable Installation costs are based on the average costs incurred in five central offices in different states, only two of which are in Washington. The Joint CLECs further assert that Qwest provided no evidence demonstrating that these offices are representational of offices with collocation in Washington, nor did Qwest provide an explanation as to the rationale behind the choice of these five offices.³⁸⁷ The Joint CLECs go on to recommend that

the Commission "authorize Qwest to charge rates for this element that are no higher than Verizon's rates for DC Power installation and DC Power Cable."³⁸⁸

351 Commission Staff points out that one of these five central offices is located in Crystal, Minnesota, and required power cables of over 300 feet in length. Staff further points out that the inclusion of this office in its study necessarily inflates Qwest's power cost estimations and, therefore, the alleged cost of collocation in Washington.³⁸⁹ In support of this assertion Staff points out that the average power cable length in Qwest's 41 collocation job study is greater than the average power cable length found in the 21 Washington central offices which were included in that study.³⁹⁰

352 Staff also asserts that Qwest's study assumes higher power costs for caged vs. cageless collocation.³⁹¹ Staff argues that Qwest should always assume the use of a battery distribution fuse board (BDFB) instead of assuming that certain higher-amperage power feeds extend all the way to the main power board, because the latter design uses significantly longer and larger gauge cables.³⁹²

³⁸⁷ Joint CLEC *Part A Post-Hearing Brief* at para. 69.

³⁸⁸ *Id.* at para. 72.

³⁸⁹ *Opening Brief of Commission Staff* at para. 55. *See also* Joint CLEC *Part A Post-Hearing Brief* at para. 71.

³⁹⁰ *Response Brief of Commission Staff* at para. 17. Review of Exh. C-67, shows that the average power cable lengths from Qwest's entire 41 collocation job study are, approximately, 32% greater than the average of the power cable lengths for the 21 Washington collocation jobs.

³⁹¹ *Opening Brief of Commission Staff* at para. 57.

³⁹² *Id.* at para.57- 58.

353 Qwest responds that it made available to all parties the vendor invoices and purchase orders used in its collocation cost study. Qwest acknowledges, however, that it did not provide actual cost data for all collocation jobs performed in Washington over the past 2 ½ years in response to a data request by the Joint CLECs.³⁹³ Qwest also argues that there are only 21 Washington jobs in its study, and that its study is more reliable because DC power cable length data from the entire 41 job study is utilized.³⁹⁴

354 In response to Staff's comments on the use of a BDFB, Qwest asserts that none of the four manufacturers of BDFBs who were considered in this study have a BDFB with more than a 70 amp fuse in their primary product line. According to Qwest, that means that the largest power feed cable is limited to this amperage, and any larger amperage requirement must be provided from the Main Power Board (MPB) with the standard BDFBs.³⁹⁵

355 Regarding the difference in price of cable installation between caged and cageless collocation options, Qwest states that this difference is due to the fact that cageless collocation uses less room and is more likely to be closer to the power supply than is the caged collocation option.³⁹⁶

Discussion and Decision

356 The Commission notes that these comments are substantially similar to comments made during the previous proceeding, as evidenced by a rereading of the 17th Supplemental Order, para. 314. The Commission is unpersuaded by Qwest's argument that it is better to use the power-cable-length data from the Company's entire 41 collocation job sample to set costs for Washington. Qwest's argument that 21 Washington collocation jobs is too small a sample on which to base prices is unconvincing, particularly in light of the Company's counter assumption that its sample of five central offices is adequate for estimating the usage portion of its power rate element.³⁹⁷

³⁹³ *Reply Brief of Qwest* at p. 19, footnote 2.

³⁹⁴ *Opening Brief of Qwest Corporation* at para. 149.

³⁹⁵ *Id.* at para. 151.

³⁹⁶ *Reply Brief of Qwest* at para. 61.

³⁹⁷ *Id.* at para. 63.

357 We also note that the average power-cable-length for the entire 41 collocation job sample is approximately 32% greater than the Washington-specific sample. We regard this discrepancy as further evidence that Qwest's current assumptions concerning the length of DC power cable in Washington are unreliable.

358 The Commission adopts the average power-cable length from the 21 Washington collocation jobs contained in Qwest's study as the values to be utilized in modeling the cost of DC Power Cable Installation, and we direct Qwest to make a compliance filing utilizing the Commission adopted power-cable length.

(iii) Grounding and Backup AC Power

359 The Joint CLECs' arguments regarding grounding and back-up AC power are similar to those they make regarding Qwest's DC power cable study.³⁹⁸ The Joint CLECs also contend that Qwest fails to justify offering the Grounding rate element on a per-job basis for cageless collocation, while offering it on per-foot basis for caged collocation.³⁹⁹ The Joint CLECs further argue that Qwest's proposed per-foot pricing for Grounding and Backup AC Power Cable violates the FCC's collocation orders by failing to provide a sufficiently definite price for that element.⁴⁰⁰

360 The Joint CLECs request that the Commission authorize Qwest to charge no more for Grounding for caged collocation than its grounding costs for cageless collocation. Alternatively, they propose that Qwest charge no more for Grounding for caged collocation than Verizon has proposed to charge (as part of its Cage Enclosure element). With respect to Backup AC Power Cable, the Joint CLECs recommend that the Commission authorize Qwest to charge no more than Qwest's costs to provide AC outlets for cageless collocation.⁴⁰¹

³⁹⁸ Joint CLEC *Part A Post-Hearing Brief* at para. 74. Grounding and AC Backup costs are derived from Qwest's five-office study.

³⁹⁹ *Ibid.*

⁴⁰⁰ *Id.* at para. 75.

⁴⁰¹ *Ibid.*

361 Qwest responds that the difference between its Grounding offer for caged versus cageless collocation is due to differences in the sizes of power feeds that are available for these respective collocation options. Cageless collocation is available only in 20 to 60 amp feeds, however, power for caged collocations is available up to 400 amps requiring a separate grounding element.⁴⁰² Regarding the Joint CLECs suggestion that its Back up AC Power Cable should be priced at the level of Qwest's AC outlets, Qwest argues that these two elements are not the same.⁴⁰³

Discussion and Decision

362 The Commission notes that the Joint CLECs fail to provide a legal citation in support of their allegation that Qwest's per-foot pricing violates the FCC's Collocation rules, and the Commission is unable to substantiate that claim. The Commission finds that Qwest's explanation for the distinction between caged and cageless collocation is sensible.⁴⁰⁴ We reject the Joint CLECs' proposal, and adopt Qwest's proposed Grounding and Backup AC Power costs.

(c) Floor Space Rental

363 While the Joint CLECs express concern with the methodology utilized by Qwest in calculating this rate element, they do not propose that it be modified.⁴⁰⁵ Instead the Joint CLECs recommend that the Commission address these concerns in connection with Qwest's Space Construction element, discussed above.

Discussion and Decision

364 We agree with the Joint CLECs proposal and therefore approve Qwest's proposed Floor Space Rental Charge along with any changes to this charge which might result from Commission Ordered modifications to Qwest's Space Construction element, as discussed above.

⁴⁰² *Reply Brief of Qwest* at para. 65, quoting Exh. C-15, pp. 13-14.

⁴⁰³ *Id.* at para. 66.

⁴⁰⁴ *Reply Brief of Qwest* at para. 65.

⁴⁰⁵ *Joint CLEC Part A Post-Hearing Brief* at para. 78.

(d) DS-0, DS-1 & DS-3 Terminations

365 DS-0, DS-1, and DS-3 Terminations provide the point at which collocating CLECs can access unbundled network elements, particularly unbundled loops. The Joint CLECs assert that Qwest's rates for DS-0, DS-1, and DS-3 Terminations are considerably higher than Verizon's rates.⁴⁰⁶ They contend that Qwest's non-recurring rates for 100 DS-0 terminations are seven times greater than what Verizon proposes, those for 28 DS-1 terminations are ten times greater than what Verizon proposes, and a single DS-3 termination is double what Verizon proposes.⁴⁰⁷

366 The Joint CLECs ask the Commission to limit Qwest's rates for DS-0, DS-1, and DS-3 Terminations to the levels proposed by Verizon. Alternatively, they propose that the Commission condition any approval of Qwest's proposed rates on an order allowing CLECs to self-provision this element and on development of satisfactory terms and conditions for such self-provisioning in Qwest's SGAT, currently under review in Consolidated Docket Nos. UT-003022 & UT-003040."⁴⁰⁸

367 The Joint CLECs note that Qwest has represented that it will permit CLECs to self-provision these facilities using an approved contractor, but they argue that such a representation is not enforceable, particularly when Qwest has yet to establish terms and conditions for such self-provisioning.⁴⁰⁹

368 Qwest states that it is willing to negotiate terms and conditions for these elements with any requesting CLEC.⁴¹⁰ Qwest also argues that there is no evidence whatsoever that Qwest's costs are the same as Verizon's; thus, rates based on Verizon's costs would not be "cost-based" as to Qwest.⁴¹¹

Discussion and Decision

⁴⁰⁶ *Id.* at para. 79.

⁴⁰⁷ Response Testimony of Rex Knowles, Exh. T-151 at pp. 20-21.

⁴⁰⁸ Joint CLEC *Part A Post-Hearing Brief*, at para. 80.

⁴⁰⁹ *Id.* at para. 79.

⁴¹⁰ *Reply Brief of Qwest* at para. 71.

⁴¹¹ *Ibid.*

369 Qwest and Verizon use the same DS-0, DS-1, and DS-3 facilities to provide the same functionality, yet Qwest presents no evidence to explain why its termination rates are substantially higher than Verizon's rates. We find that Qwest's proposed rates are unreasonably excessive, and we adopt Verizon's proposed termination rates in their stead.

370 This decision is consistent with several other decisions that the Commission makes in this Order: the Commission rejects Verizon's cable length assumptions and adopts Qwest's cable length assumptions for use in Verizon's cost study;⁴¹² the Commission rejects Qwest's proposed entrance facility rates and adopts those proposed by Verizon to be the permanent rates for both ILECs;⁴¹³ and the Commission rejects Qwest's cage enclosure costs and adopts Verizon's prices for cage enclosure as permanent prices for Qwest.⁴¹⁴

371 We direct Qwest to make a compliance filing utilizing Verizon's proposed DS-0, DS-1, and DS-3 termination rates. However, the Commission will allow Qwest to request further consideration of its costs subsequent to the development of terms and conditions for the self-provisioning of this element by CLECs in Qwest's SGAT proceeding, Consolidated Docket UT-003022 and UT-003040.

(e) Cable Splicing

372 The Joint CLECs make the same arguments regarding cable splicing that they make in support of their proposed \$28 per splice charge for fiberoptic cable.⁴¹⁵

Discussion and Decision

373 The Commission rejects the Joint CLECs' proposal and approves Qwest's better documented and substantiated proposed splicing charges.

⁴¹² See Para. 217, above.

⁴¹³ See Para. 340, above.

⁴¹⁴ See Para. 349, above.

⁴¹⁵ Joint CLEC *Part A Post-Hearing Brief* at para. 81.

4. Assorted Other Issues

a. Microwave Collocation Tariff

- 374 Teligent asks that the Commission order Verizon and Qwest to file collocation tariffs that offer microwave collocation at standard prices and on standard terms and conditions, in a one-stop methodology, subject to the provisioning requirements applicable to other forms of collocation.⁴¹⁶ According to Teligent, Verizon and Qwest currently subject microwave collocation applications to the bona fide request ("BFR") process and to individual case basis ("ICB") prices.⁴¹⁷
- 375 Teligent argues that it is discriminatory to subject microwave collocation to procedures that are more burdensome and/or costly than those imposed on other forms of physical collocation. Teligent states that microwave collocation is substantially similar to conventional physical collocation arrangements except for the need to place fixed-wireless CLEC interconnection-related equipment on the central office rooftop (or other suitable place) in addition to within the central office.⁴¹⁸ Teligent proposes guidelines to establish just and reasonable rates for microwave collocation.
- 376 Both Verizon and Qwest note that Teligent did not file direct evidence or call a witness during Part A hearings, and they argue that Teligent fails to establish a factual record in support of its proposal.⁴¹⁹ The ILECs variously argue that the number of microwave collocation requests received have been so few that there is insufficient data from which to develop a standard offering,⁴²⁰ and that each microwave collocation arrangement is unique.⁴²¹

⁴¹⁶ *Opening Brief of Teligent* at para. 6.

⁴¹⁷ *Id.* at para. 4. *See also Opening Brief of Qwest Corporation* at para. 170, and *Post Hearing Brief of Verizon* at para. 136.

⁴¹⁸ *Opening Brief of Teligent* at para. 10.

⁴¹⁹ *Reply Brief of Qwest* at para. 75; *Reply Post Hearing Brief of Verizon*, at para. 87.

⁴²⁰ *Reply Brief of Qwest* at para. 76.

⁴²¹ *Reply Post Hearing Brief of Verizon* at para. 88.

Discussion and Decision

377 The Commission finds that the type of standardized tariff suggested by Teligent will be useful in promoting competitive entry into Washington's local telecommunications market. The Commission therefore directs Qwest and Verizon to file standardized microwave collocation tariffs to be considered in Part B of these proceedings.

378 The Commission agrees with the ILECs that the record in this docket is insufficient for rate-setting purposes. We find, however, substantial material in the hearing transcript and Teligent's post-hearing briefs to provide the requisite guidance to the ILECs in developing their respective microwave tariff offerings.⁴²²

379 The Commission further directs Qwest and Verizon to model their tariff offerings consistent with collocation costs developed in Part A and Teligent's proposed design of a microwave collocation tariff offering, and to explain any departure from those guiding sources. The Commission will consider evidence on the differing costs, if any, associated with Microwave rooftop collocations in Part B of this proceeding, and a prehearing conference will be noticed to establish a filing schedule for this issue.

b. Verizon's True-up Proposal

380 Verizon contends that until the Supreme Court acts on matters pending, the applicable law on pricing methodology is in a state of flux, and that if the Commission bases its decisions on the FCC's current pricing rules, it will have to revisit those decisions if the FCC's rules are vacated by the Supreme Court.⁴²³ Verizon proposes that the Commission classify as interim the costs and rates established in this proceeding and that these costs and rates be subject to a true-up

⁴²² In response to the ILECs contention that there is not enough data upon which to base a rate, it should be pointed out that this has not deterred them from using assumptions to develop standard rates in other areas. For example, regarding splitter costs and collocation for line sharing, Verizon notes it "could only develop costs based on estimates of the equipment and activities necessary to provision this brand new service." *Reply Post Hearing Brief of Verizon* at para. 20.

⁴²³ *Reply Post Hearing Brief of Verizon* at para. 5; see also, *Post Hearing Brief of Verizon* at para. 17-22.

once the matter is settled by the Supreme Court.⁴²⁴

381 The Joint CLECs and the DLECs urge the Commission to reject Verizon's proposal. The DLECs state that the current proceeding is in no way an interim proceeding. They argue that since each party has put on its case in accordance with applicable law, the prices established by the Commission should go into effect; should the law change, parties are free to seek to establish new prices based on that change. The DLECs contend that to do otherwise would defeat the purpose of this proceeding.⁴²⁵

382 The Joint CLECs concur with the DLECs and they argue that a true-up provision would severely chill competitive activity in Washington because competitors need certainty in the prices they pay for bottleneck monopoly facilities they obtain from the ILECs to provide service to customers. They argue that CLECs have no means of obtaining additional revenue from customers for service rendered in the past if prices are increased retroactively in the future.⁴²⁶

383 The Joint CLECs also argue that Verizon's proposal is inconsistent with the conditions to which it agreed as part of the merger between Bell Atlantic and GTE. According to the Joint CLECs, Verizon expressly agreed to price facilities it provides to competitors based on the FCC's TELRIC rules pending ultimate resolution of the court challenges to those rules and the FCC recently reinforced that condition in a letter ruling.⁴²⁷ Verizon's proposal for a retroactive adjustment to TELRIC-based rates established by the Commission would render that condition meaningless.⁴²⁸

Discussion and Decision

⁴²⁴ *Ibid.*

⁴²⁵ *Part A Post Hearing Reply Brief of Covad and Rhythms* at para. 6.

⁴²⁶ *Joint CLEC Part A Post-Hearing Reply Brief* at para. 4.

⁴²⁷ *See In re Bell Atlantic/GTE Merger*, CC Docket No. 98-184, DA 00-2168, Letter from Dorothy T. Attwood, Chief, Common Carrier Bureau to Michael Glover, Senior Vice President & Deputy General Counsel, Verizon Communications (Sept. 22, 2000).

⁴²⁸ *Id.* at para. 5.

384 The current docket is not an interim proceeding. During this part of the proceeding each party has put forth its case in accordance with applicable law. Therefore, the Commission contemplates that the prices established by the Commission in Part A of this proceeding will go into effect as permanent prices, unless expressly noted otherwise. Should the law change, parties may seek to establish new prices based on that change, which will apply prospectively. The Commission denies Verizon's request for a true-up.

c. Issues Raised In Briefs

385 Qwest asserts that the Joint CLECs raise several new issues in their brief for the first time.⁴²⁹ The issues specifically identified are:

- 1) The assertion that Qwest double-recovers motor vehicle costs, "miscellaneous" costs, and cable hole costs;⁴³⁰
- 2) The assertion that Qwest's cost for electrical outlets are almost 10 times greater for caged collocation than for cageless collocation; and⁴³¹
- 3) The assertion that Qwest's engineering costs and quote preparation fee are unsubstantiated.⁴³²

386 Qwest argues that these factual issues are not contested in the evidentiary record and that it would be unfair to consider them at this time, but also makes an offer of proof refuting the Joint CLECs' assertions.

Discussion and Decision

387 The Commission agrees that parties may not raise factual disputes for the first time in

⁴²⁹ *Reply Brief of Qwest* at para. 46.

⁴³⁰ *Id.* at para. 53.

⁴³¹ *Id.* at para. 59.

⁴³² *Id.* at para. 69.

their post-hearing briefs. We find that the issues mentioned above are not contested in the record, and that Qwest's charges are just and reasonable on their face. We further note that Qwest's offer of proof would be persuasive on each matter unless further contradicted, were we to take these issues under submission (which we do not).

IV. CONCLUSION

388 A summary of the Commission's decisions in Part A of this proceeding is divided
into four subject areas: 1) line sharing; 2) operations support systems; 3) collocation;
and 4) other issues.

Line Sharing

- 389 • **HUNE Pricing:** The Commission determines that there be a non-zero price for the high frequency spectrum unbundled network element ("HUNE"), and that a portion of the cost of the loop should be recovered from LECs provisioning digital subscriber line services. *See Para. 55 through 63.*
- 390 • **The HUNE Rate:** We establish a flat-rate contribution of four dollars for the use of the high frequency portion of the loop, rather than one that is calculated as a percentage of the cost of the loop. *See Para. 64 through 67.*
- 391 • **Parity Among LECs:** CLECs operating in Verizon's territory must make the same flat-rate contribution of four dollars for the use of the high frequency portion of the loop as CLECs operating in Qwest's territory. Verizon's subsidiary provisioning advanced telecommunications services in the state of Washington must also pay the flat-rate contribution to Verizon's regulated operations for use of the high frequency portion of the loop in Verizon's territory. *See Para. 68 through 70.*
- 392 • **Retail and UNE Rate Adjustments:** It is premature at this time to determine whether a non-zero price for the HUNE will lead to over-earnings on a regular basis. *See Para. 71 through 85.*

Operations Support Systems

- 393
- **Cost Recovery Structure:** The magnitude of OSS costs that Qwest is seeking to recover is excessive and Qwest's proposed prices fail the just and reasonable standard of Section 252(d)(1) of the Act. Verizon's proposed OSS rates are just and reasonable, and we approve these charges to be applied on a local service request basis. In light of our concern about the costs reported by Qwest, Qwest must charge OSS transaction and transition charges equal to Verizon's approved rates, and these charges must be applied on a local service request, rather than a service order, basis. *See Para. 144 through 159.*
- 394
- **Level of Cost Recovery:** Verizon's Washington OSS transition collection may not exceed \$1.9 million and Qwest's Washington OSS transition collection may not exceed \$5.5 million. *See Para. 160.*
- 395
- **Cost Recovery Mechanism - Retail Rates:** The Commission will not require that OSS transition recovery revenue be used to reduce other wholesale or retail rates at this time. *See Para. 161 through 163.*
- 396
- **OSS Cost Audit:** We find that it is unnecessary at this time to undertake an independent audit of the costs incurred by Qwest and Verizon to modify their OSS for use by CLECs. *See Para. 164 through 166.*
- 397
- **Appropriate Cost Recovery Mechanism:** CLECs must pay for reasonable OSS transition costs incurred by Qwest and Verizon in modifying their OSS for use by CLECs. *See Para. 167 through 169.*

- 398
- **OSS Costs to Provide Line Sharing:** Qwest and Verizon may recover from CLECs any reasonable OSS costs incurred to provide line sharing, and for the purpose of OSS cost recovery the high frequency portion of the loop will be treated in the same manner as all other unbundled elements requested by CLECs. *See Para. 170 through 174.*

Collocation

- 399
- **Verizon-Owned Splitter Option:** Verizon is not required to continue offering its Verizon-owned splitter option on lines not currently provided with Verizon-owned splitters beyond December 15, 2000. *See Para. 196 through 197.*
- 400
- **Line Splitting Over UNE-P:** The issue of line splitting over an unbundled network element platform ("UNE-P") will be addressed in Part B of this proceeding. *See Para. 198.*
- 401
- **Cable Lengths:** Qwest's cable length assumptions are reasonable. The Commission rejects Verizon's cable length assumptions as unreasonable, and adopts Qwest's cable length assumptions for use in Verizon's cost study. Further, a CLEC that is already collocated in an ILEC's central office to reuse tie cables, previously used for other purposes, for line sharing. *See Para. 210 through 218.* Verizon may require CLECs to use Category 5 cable to provide xDSL services when collocating in its central offices. *See Para. 219 through 221.*
- 402
- **Engineering Costs:** Qwest's total planning and engineering time estimate for the provisioning of line sharing splitters is not reasonable. Verizon's estimates are reliable and reasonable. However, Verizon's estimates are not a fair substitute for Qwest and we determine that fifteen hours maximum is a just and reasonable adjusted estimate for Qwest. *See Para. 226 through 232.*
- 403
- **Qwest Shelf Allocations (Fill Rate):** Qwest's assumption of eight splitters per relay and cable rack is reasonable. *See Para. 235.*
- 404
- **Use of Digital Circuit Equipment in Verizon's Model:** Verizon

inappropriately considers splitters as digital circuit equipment in applying maintenance and support factors to collocation line sharing. *See Para. 238 through 239.*

- 405 • **Verizon's Jumper Costs:** Verizon must make appropriate revisions to its cost study to reflect the costs of only two jumpers on the main distribution frame ("MDF") incremental to line sharing. *See Para. 241.*
- 406 • **Verizon Splitter Provisioning:** Verizon-owned splitters may be provided to CLECs from a common pool of splitters on a "port-at-a-time" basis. *See Para. 243.*
- 407 • **Efficient Splitter Configuration:** Qwest may recover costs associated with the use of an intermediate distribution frame ("IDF") in the company's interconnection tie pair charge when that particular splitter collocation option is implemented. *See Para. 248 through 249.*
- 408 • **The Lack of Washington-Specific Data:** The Commission finds that UNE collocation cost models contain little or no Washington-specific data. We do not, however, require the ILECs to re-file collocation cost studies. *See Para. 258 through 259.*
- 409 • **Verizon's Cage Enclosure Costs:** Verizon's model does not provide a just and reasonable estimate for gate costs in Washington because it includes data based on significantly higher gate costs incurred in California. We require that Verizon make a compliance filing of its model using only the cost of Texas cage gates, indexed to a national average and then adjusted to account for Washington-specific differences. Verizon must also modify its application of vendor engineering and overhead costs ("mark-up costs") to its fencing costs. *See Para. 275 through 282.*
- 410 • **Verizon's Building Modification Costs:** The Commission finds that Verizon's Card Reader and Controller costs and apportionment of costs are just and reasonable, and we approve the Company's proposal. However, we reject Verizon's proposed Storage Security costs because its estimates are excessively subjective and lack reliable supporting evidence. *See Para. 289*

through 291. We direct Verizon to convert its Demolition, Minor HVAC and Dust Partition cost estimates to non-recurring costs and segregates these items into separate non-recurring cost elements to be applied on an as needed basis for caged and cageless collocation. *See Para. 297 through 299.* Verizon's Lighting and Electrical Outlet elements also must be converted to non-recurring costs and segregated into separate non-recurring cost elements. The Commission also finds that Verizon's ground bar cost must be recovered through a separate non-recurring charge. *See Para. 305 through 306.*

- 411
- **Verizon's DC Power Supply:** The Commission accepts Verizon's proposed labor rate of 15 minutes per foot for DC power cable pulls. However, we reject Verizon's proposed monthly recurring charge of \$513 per month for 40 amps of power per feed and Verizon's monthly recurring power costs must be recalculated on a per-amp basis only, rather than on the proposed per-amp per-feed basis. *See Para. 314 through 318.*
- 412
- **Verizon's Environmental Conditioning:** Verizon's proposed cost fails to adequately capture the costs that would be incurred by collocating CLECs in the event that an existing HVAC system is sufficient to meet the demands of all carriers. Verizon must develop a separate charge element to recover those HVAC costs which a collocating CLEC would incur in the event that it shares an existing central office HVAC system with Verizon and other collocating CLECs. *See Para. 321 through 322.*
- 413
- **Verizon's Cable Splicing:** The Commission accepts Verizon's proposed per-fiber nonrecurring splicing charges. *See Para. 325 through 326.*
- 414
- **Qwest's Entrance Facilities:** The Commission rejects Qwest's proposed entrance facility rates because they are not based directly on the invoices underlying Qwest's collocation study. We adopt Verizon's proposed rates as the permanent rates for both ILECs. *See Para. 338 through 340.*

- 415
- **Qwest's Space Construction:** Qwest must disaggregate the Space Construction charge into its separate sub-elements in order to allow CLECs to identify just what it is they are paying for. *See Para. 343 through 345.* Qwest's cage enclosure cost data is unreliable, and the Commission adopts Verizon's prices for cage enclosure as permanent prices for Qwest. *See Para. 349.* The Commission adopts the average power-cable length from the 21 Washington collocation jobs contained in Qwest's study as the values to be utilized in modeling the cost of DC Power Cable Installation. *See Para. 356 through 358.* We also approve Qwest's Grounding and Backup AC Power proposal. *See Para. 362.*
- 416
- **Qwest's Floor Space Rental:** We approve Qwest's proposed Floor Space Rental Charge along with any changes to this charge which might result from Commission Ordered modifications to Qwest's Space Construction element. *See Para. 364.*
- 417
- **Qwest's DS-0, DS-1 and DS-3 Terminations:** The Commission finds that Qwest's proposed rates are unreasonably excessive, and we adopt Verizon's proposed termination rates in their stead. *See Para. 369 through 371.*
- 418
- **Qwest's Cable Splicing:** The Commission approves Qwest's proposed splicing charges. *See Para. 373.*

Other Issues

- 419
- **Microwave Collocation Tariff:** The Commission directs Qwest and Verizon to file standardized microwave collocation tariffs to be considered in Part B of these proceedings. *See Para. 377 through 379.*
- 420
- **Verizon's True-up Proposal:** The current docket is not an interim proceeding, and the Commission denies Verizon's request for a true-up. *See Para. 384.*
- 421
- **Issues Raised in Briefs:** The Commission agrees that parties may not raise factual disputes for the first time in their post-hearing briefs. *See Para. 387.*

V. FINDINGS OF FACT

422 Having discussed above in detail the written testimony and the documentary evidence concerning all material matters, and having stated our findings of fact and conclusions of law in the text of the Order, the Commission now makes the following abridged summary of those comprehensive determinations. Those portions of the preceding detailed findings and conclusions in this matter are incorporated by this reference.

423 (1) The Washington Utilities and Transportation Commission is an agency of the state of Washington, vested by statute with authority to regulate rates, rules, regulations, practices, accounts, securities, and transfers of public service companies, including telecommunications companies.

424 (2) Qwest Corporation and Verizon Northwest, Inc., are each engaged in the business of furnishing telecommunications service within the state of Washington as a public service company.

Line Sharing

425 (3) Networks that provide voice services are increasingly being designed to provide advanced telecommunication services, thus increasing network costs. The cost of providing advanced telecommunication services is greater than zero. The loop is a shared facility that is used by voice and advanced telecommunication services. The cost-causer of upgrading networks to provide advanced telecommunication services is increasingly the end-user of advanced telecommunication services. Requiring LECs provisioning advanced telecommunication services to contribute towards these costs does not impede deployment of such services.

426 (4) Unbundled loop rates in the state of Washington have been de-averaged. Calculation of the contribution based on a percentage of the loop cost would result in a significant cost disparity between zones. Calculation of the contribution as a flat-rate would result in a price squeeze if set too high. A flat-rate contribution of four dollars for use of the high frequency portion of the loop does not result in a price squeeze and does not impede deployment of

advanced services. Unlike Qwest, Verizon provisions retail advanced telecommunications services in the state of Washington through a subsidiary not subject to rate regulation; however, the same line sharing pricing principles apply in both Qwest's and Verizon's operating territories. It is premature to determine whether a flat-rate contribution of four dollars for use of the high frequency portion of the loop will lead to over-earning by either Qwest or Verizon.

Operations Support Systems

- 427 (5) Verizon's OSS modifications are managed internally. Qwest does not perform its own OSS modifications, but relies on a contractor, Telcordia, a subsidiary of Science Applications International Corporation.
- 428 (6) Qwest's estimated national OSS transition costs are more than twice the level reported by Verizon, Qwest's proposed recovery of OSS transition costs per access line in the state of Washington is approximately four-times greater than Verizon's request per access line, and Qwest's proposed rates are as much as ten-times higher than Verizon's for the same functionality. Verizon's non-recurring charge for OSS transition cost recovery is \$3.27 per local service request and its non-recurring charge for OSS transaction cost recovery is \$3.76 per local service request, no matter how many separate service orders are placed as part of the same LSR. Qwest proposes to increase its charges proportionately with the number of ordered loops and ports. Qwest's proposal to assess charges on a service order basis does not produce predictable rates.
- 429 (7) Verizon's estimated Washington OSS transition costs are \$1.9 million. The value assigned to Qwest's OSS recovery is derived by multiplying Verizon's proposed collection in the state of Washington (\$1,900,000) by the approximate ratio of access lines of Qwest to Verizon (2.6/.9) for the state of Washington. Qwest's estimated Washington OSS transition costs are \$5.5 million
- 430 (8) U S WEST and the other RBOCs formerly owned Telcordia but sold it in 1997 to its current owners, along with the proprietary rights to many of the

software systems that are at the heart of Qwest's operations support systems. Because Telcordia is the owner of the software, Qwest must rely on this one vendor to modify operations support systems as long as Qwest retains the existing systems. Because Qwest is unable to solicit bids from competing vendors, Qwest is a captive customer of a single vendor. Telcordia's prices are not cost-based. Telcordia's ownership of software systems integral to Qwest's OSS does not result in a more cost-effective provision of support services from the perspective of Qwest's CLEC customers.

Collocation

- 431 (9) Findings of fact regarding disputed collocation issues are presented as to both policy and technical issues in two separate subject matter areas - 1) collocation costs for line sharing, and 2) collocation costs for UNE and interconnection access. Because of the nature and the number of such findings, to restate them here would possibly cause confusion. The Commission therefore references, but does not repeat, the individual findings regarding collocation.

VI. CONCLUSIONS OF LAW

432 The Washington Utilities and Transportation Commission has jurisdiction over the subject matter of this proceeding and all parties to this proceeding.

433 (1) Qwest and Verizon should be required to file line sharing, operations support systems, and collocation rate tariffs that are either proposed and uncontested or approved without change, consistent with this Order.

434 (2) Qwest and Verizon should be required to file rate tariffs and supporting compliance filings for each line sharing, operations support systems, and collocation rate element that is rejected as proposed, consistent with this Order.

VII. ORDER

435 The Commission hereby orders as follows:

- 436 (1) The rates proposed by Qwest and Verizon, respectively, are approved, in part,
and rejected, in part, consistent with our findings and conclusions as follows:
- 437 a) As to each line sharing, operations support systems, and collocation rate
element that is uncontested or is approved without change, Qwest and Verizon
must file tariffs consistent with this Order no later than three weeks after the
service date of this Order, with a stated effective date of ten business days
after the date of filing. The tariff filings must be limited to uncontested rate
elements or those specifically authorized in this Order.
- 438 b) As to each line sharing and operations support systems rate element that is
rejected as proposed, Qwest and Verizon must file rate tariffs and supporting
compliance filings consistent with this Order no later than three weeks after
the service date of this Order. Responses may be made to those items by
other parties no later than five weeks after the service date of this Order. The
Commission will enter an order approving or disapproving the subsequent
filings or giving further instructions.
- 439 c) As to each collocation rate element that is rejected as proposed, Qwest and
Verizon must file rate tariffs and supporting compliance filings consistent
with this Order no later than five weeks after the service date of this Order.
Responses may be made to those items by other parties no later than seven
weeks after the service date of this Order. The Commission will enter an
order approving or disapproving the subsequent filings or giving further
instructions.
- 440 (2) A copy of each filing with the Commission must be served on counsel for
other parties so that it is received on the date filed with the Commission.

- 441 (3) Each compliance filing must be accompanied by a brief description of what is accomplished by the filing, how it complies with the terms of this Order, and specifically must identify each input modified, including the exhibit, page, and line number where the modification was made.
- 442 (4) The Commission retains jurisdiction over all matters and the parties in this proceeding to effectuate the provisions of this Order.

DATED at Olympia, Washington, and effective this day of January, 2001.

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

MARILYN SHOWALTER, Chairwoman

RICHARD HEMSTAD, Commissioner